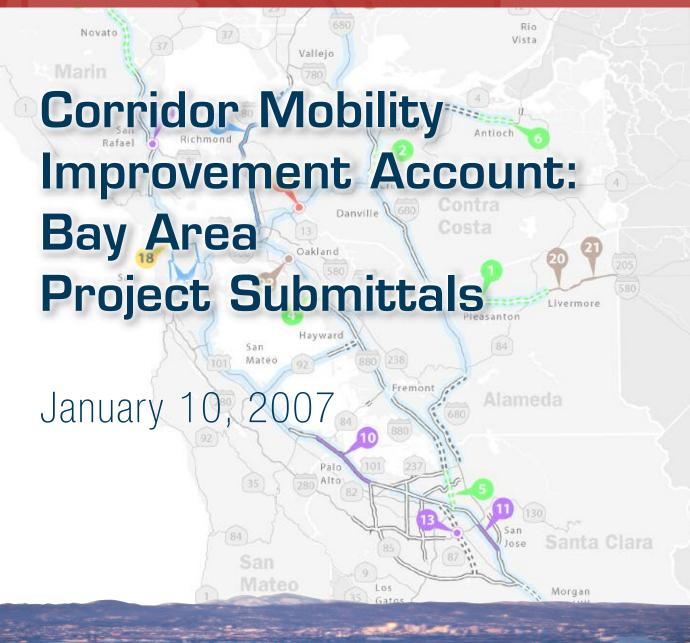


#### COMMISSION METROPOLITA





**METROPOLITAN TRANSPORTATION** COMMISSION



METROPOLITAN
TRANSPORTATION
COMMISSION

Joseph P. Bort MetroCenter 101 Eighth Street Oakland, CA 94607-4700 TEL 510.817.5700 TTY/TDD 510.817.5769 FAX 510.817.5848 E-MAIL info@mtc.ca.gov WEB www.mtc.ca.gov

Jon Rubin, Chair San Francisco Mayor's Appointee

John McLemore, Vice Chair Cities of Santa Clara County

January 10, 2007

Tom Ammiano

City and County of San Francisco

Irma L. Anderson Cities of Contra Costa County

Tom Azumbrado
U.S. Department of Housing
and Urban Development

**Bob Blanchard** Sonoma County and Cities

**Bill Dodd** Napa County and Cities

**Dorene M. Giacopini**U.S. Department of Transportation

Federal D. Glover

Scott Haggerty Alameda County

Anne W. Halsted San Francisco Bay Conservation and Development Commission

> Steve Kinsey Marin County and Cities

Sue Lempert Cities of San Mateo County

Bijan Sartipi State Business, Transportation and Housing Agency

> James P. Spering Solano County and Cities

Adrienne J. Tissier San Mateo County

Pamela Torliatt
Association of Bay Area Governments

**Ken Yeager** Santa Clara County

Shelia Young Cities of Alameda County John Barna

Executive Director California Transportation Commission 1120 N Street, Room 2221 – MS 52 Sacramento, CA 95814

Attention: David Brewer

Dear Mr. Barna:

With this letter, I am pleased to transmit MTC's proposed Program of Projects for the Corridor Mobility Improvement Account (CMIA).

MTC's Program of Projects for the CMIA includes roughly \$2 billion in significant corridor mobility and congestion relief projects in the nine-county Bay Area. The program was developed according to the California Transportation Commission guidelines for the CMIA Program, and is the product of a collaborative effort between MTC and its transportation partners throughout the region.

Please feel free to contact me at (510) 817-5850, or Kenneth Folan of my staff at (510) 817-5804 if you need further information about our region's nominations. We look forward to working with you in finalizing the CMIA Program.

Sincerely,

Alix Bockelman Director Programming and Allocations

Steve Heminger Executive Director

Ann Flemer
Deputy Executive Director, Operations

Andrew Fremier
Deputy Executive Director,
Bay Area Toll Authority

Therese W. McMillan
Deputy Executive Director, Policy

cc: Ross Chittenden, Caltrans HQ Bijan Sartipi, Caltrans D4

## CORRIDOR MOBILITY IMPROVEMENT ACCOUNT (CMIA) PROPOSED PROGRAM OF PROJECTS

MTC Resolution No. 3792

For the Nine-County San Francisco Bay Area Region



METROPOLITAN
TRANSPORTATION
COMMISSION

January 10, 2007

http://www.mtc.ca.gov

### METROPOLITAN TRANSPORTATION COMMISSION

Joseph P. Bort MetroCenter • 101 Eighth Street • Oakland, CA 94607-4700 Tel. 510.817.5700 • TDD/TTY 510.817.5769 • e-mail info@mtc.ca.gov

### CORRIDOR MOBILITY IMPROVEMENT ACCOUNT (CMIA) MTC's Program of Projects

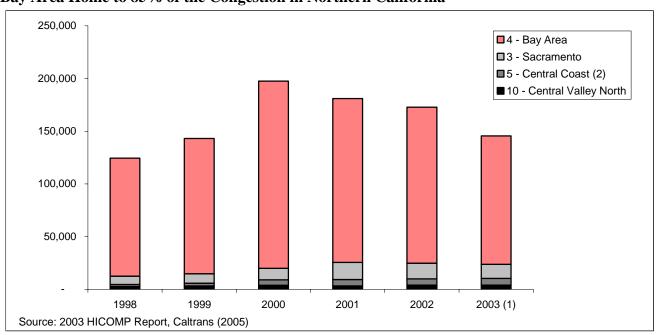
#### Introduction

MTC's Program of Projects for the CMIA includes about \$2 billion in important corridor mobility and congestion relief projects in the nine-county Bay Area. A map of these investments follows this introduction. The program was developed according to the California Transportation Commission guidelines for the CMIA Program, and is the product of a collaborative effort between MTC, Caltrans and transportation partners throughout the region.

The Bay Area's actual need for CMIA funding far exceeds the statutorily available amount, as evidenced by the \$4 billion submitted to MTC for consideration. The region again is responding to a challenging funding environment with local funds and innovative funding solutions. The \$2 billion CMIA request is part of a \$4.6 billion funding strategy for highway improvements that includes local, regional, state and federal funding. The region will leverage the CMIA funding with \$1.3 billion in existing funding commitments and over \$200 million in future Regional Transportation Improvement Program (RTIP) funding to make congestion relieving, safety and connectivity investments to the state highway system.

The Program of Projects focuses on congestion relief, the primary goal of the CMIA program. As shown below, the Bay Area is home to roughly 85% of the congestion in the "north" of the state and the Program of Projects will provide relief in all of the congested corridors. In addition, the Program of Projects addresses safety and connectivity concerns and includes over 100 miles in new high occupancy vehicle (HOV) lanes including various HOV gap closures, a potential 30% addition to the existing HOV network.

#### Bay Area Home to 85% of the Congestion in Northern California



- (1) Last year for which statewide data has been published.
- (2) Data for 2003 are estimated. District did not perform monitoring in 2003.

#### **Congestion Relief**

On the congestion relief side, the package of investments strongly supports the completion of HOV lanes – both projects that close gaps in the existing HOV network and projects that would extend the network. Corridors slated for HOV lanes are Routes 4 and Interstate 680 through Contra Costa County; Interstate 580 through the Livermore Valley in Alameda County; Interstate 880 through Santa Clara County; and U.S. 101 through Marin and Sonoma counties. In some corridors, such as the Interstate 80 corridor leading to the Bay Bridge and the 101 corridor through Santa Clara and San Mateo counties, where land and capacity is constrained, congestion reduction strategies involve auxiliary lanes and/or system management techniques like improved incident signage, variable speeds, and ramp metering.

#### **Safety and Connectivity**

The proposal also aims to improve safety and connectivity. For example, the proposal supports eliminating a discontinuity in the system between Alameda and Contra Costa counties by constructing a fourth bore through the Caldecott Tunnel. Additionally, the proposal includes improvements to an east-west connector between Solano and Napa counties, State Route 12. Finally, the proposal supports significant investment to replace the south access to the Golden Gate Bridge, Doyle Drive, to improve safety on this structurally and seismically deficient bridge approach.

#### **Regional System Management**

Consistent with the CTC guidelines that emphasize corridor system management and preservation of mobility improvements over time, MTC's proposal includes roughly \$100 million in regional system management projects. These improvements complement other improvements along Interstate 580, U.S. 101 in San Mateo and Santa Clara counties, and Interstate 80 through Solano County. Further, as part of the Commission endorsement of the project list, there is a commitment to completion of corridor system management plans to support continued congestion relief in corridors selected for CMIA funding. This was included in the adopting resolution – a commitment by MTC, in cooperation with Caltrans, to continue to develop the Freeway Performance Initiative, which will establish appropriate corridor and system management strategies based on performance assessment and congestion reduction. All projects proposed as part of the MTC Program of Projects will include the system management components needed to manage the system. This is consistent with MTC Resolution 3609, which established a regional policy to include Traffic Operations System (TOS) equipment in all major freeway projects.

#### **Strategic Corridor Investment Strategy**

All told, these improvements total roughly \$2 billion and are summarized by corridor below:

Corridor/Project Category	Congestion (Vehicle Hours of Delay)	MTC Recommendation (in million \$s)
State Route 4 – Contra Costa	8,960	85
State Route 12 – Napa/Solano	N/A	89
State Route 24/I-680 – Alameda/Contra Costa	8,310	186
I-80 – Alameda/Contra Costa/Solano	21,110	213
U.S. 101 Corridor – San Mateo/Santa Clara	12,280	224
U.S. 101 Corridor – San	16,660	546
Francisco/Marin/Sonoma		
I-580/I-238 – Alameda	15,470	294
I-880 – Alameda/Santa Clara	11,360	285
Regional System Management	29,600	102
Total		\$2,024

#### **Broad Highway Vision**

Because the CMIA has synergies with other bond programs, the MTC adopted Program of Projects includes other complementary Proposition 1B and state fund sources such as Trade Corridor, Interregional Improvement Program, Intelligent Transportation System, SHOPP, and RTIP to assist the Commission and the CTC in developing and programming a comprehensive funding strategy to address congestion, system management and goods movement in the Bay Area's major freeway corridors.

For the ITIP, MTC's recommendation includes \$100 million, or 20% of the \$500 million ITIP bond category available statewide, based on historical programming. MTC, working with Caltrans, has identified strong ITIP candidates, focusing on two key corridors with interregional benefit: 1) I-80 through Solano county; and 2) U.S. 101 through Marin and Sonoma counties.

For the Trade Corridor program, MTC has identified \$190 million in highway facility improvements along Interstates 580, 880, and 80. While we understand that Trade Corridor decisions will trail the CMIA project selection by CTC, MTC has identified the CMIA/Trade link as part of the CMIA submittal to better illustrate the overall transportation infrastructure needs in the Bay Area.

As noted above, MTC has identified other complementary Proposition 1B and state fund sources such as SHOPP (including local Intelligent Transportation System funds), and RTIP to assist the CTC in developing and programming a comprehensive funding strategy to address congestion, system management and goods movement in the Bay Area's major freeway corridors. The commitment to the Regional Transportation Improvement Program (RTIP) funds was formalized through the adopted resolution that stated that MTC and the Congestion Management Agencies commit to the RTIP funding amounts identified in the submitted CMIA Program of Projects for all projects selected for CMIA funding by the CTC.

#### **Consistency with Caltrans List**

Proposition 1B calls for both MTC, as the Regional Transportation Planning Agency (RTPA), and Caltrans to submit project nominations for the Bay Area. MTC has worked with Caltrans, in cooperation with the county Congestion Management Agencies (CMAs), to develop similar recommendations based on critical regional needs. The unified approach demonstrates that the transportation partners in the Bay Area are serious about delivering congestion relieving and performance enhancing projects in the region.

The primary difference between the Caltrans and MTC list for the Bay Area is related to the inclusion in the MTC Program of Projects of expanded project limits and extended HOV lane mileage for the same congested corridors as emphasized in the Caltrans District 4 submittal. The MTC list is roughly \$600 million higher, reflecting the vastness of the need in meeting the Bay Area's congestion needs – which is roughly 85% of the congestion in the northern part of California.

#### **Congestion Relief/Carpool Lanes Intelligent Transportation Systems (ITS)** 1 I-580 HOV lane: Hacienda to Greenville U.S. 101 Narrows HOV lane extension: 16 I-80 Integrated Corridor Mobility SR 37 to south of SR 116 2 I-680 HOV lane extension: N. Main St. in 17 SFGo corridor management Walnut Creek to SR 242 **Other Congestion Relief** Regionwide system management 3 I-80/I-680/SR 12 Interchange and I-80 10 U.S. 101 add lanes: Marsh Rd. to SR 85 **HOV lane:** Red Top Rd. to Airbase Parkway 11 U.S. 101 widening and interchanges: Safety 4 I-880 SB HOV lane extension: Yerba Buena to I-280/I-680 18 South access to Golden Gate Bridge: 98th Ave. to Marina Blvd. 12 U.S. 101/I-580 corridor improvements Doyle Drive replacement 5 I-880 HOV lane extension: 13 I-880/I-280 interchange: Includes Stevens SR 237 to U.S. 101 Creek Boulevard and Winchester off-ramps 19 Cordelia truck scales 6 SR 4 East HOV lane extension: Somersville to SR 160 20 I-580 EB truck climbing lane: Greenville to 14 SR 12 Jameson Canyon widening Altamont Pass 7 U.S. 101 HOV lane extension: Railroad Ave. to Wilfred Ave. SR 24: Caldecott Tunnel fourth bore 21 I-580 WB truck climbing lane: I-580/I-205 to Altamont Pass U.S. 101 HOV lanes: Steele Ln. to Windsor River Rd. 22 I-880 operational and safety improvements: 23rd Ave. and 29th Ave. 128 Napa Vacaville Solano Novato Vista Vallejo Marin Creek **MTC Recommended Highway Projects** 团 **For Proposition 1B** Livermore **Funding\*** 84 Mateo Legend **Alameda** Corridor with peak-period 92 freeway congestion HOV Lane (existing) HOV Lane (under ---construction or funded) Congestion Relief/Carpool Lane project to be built with Santa Clara Proposition 1B funds San Other Congestion Relief project to be built with Proposition 1B funds Mateo 35 Gatos Connectivity project to be built with Proposition 1B funds Safety project to be built with Proposition 1B funds Trade project to be built with Proposition 1B funds Miles

Street base map © Thomas Bros. Maps All rights reserved. MTC Graphics/pb — 1/9/2007 \*Focused on highway improvements through Corridor Mobility Improvement

Transportation Systems; and SHOPP

Account; Trade Corridors; State Transportation Improvement Program; Intelligent

### **Metropolitan Transportation Commission** CMIA Program of Projects and Companion Funding Strategy (all funding in thousands)

CC   Feb Integrated Corridor San Mateo/Santa Clara   SM   US 101 Additional lanes from Marsh Rd to SR 85, including   \$271,076   \$66,660   \$194,426   \$10,000   \$13,000   \$13,000   \$13,000   \$13,000   \$10,					(all fi	unding in thousand	•					
Price and Project Comments   Price and Project Comments   Price and Project Comments   Price and Project Comments   Price and Price an						Pr I	oposition 1B/	State Funds	I			
State Route 2 Centrol Control Costes   State Route 12 Centrol Costes   State Route 12 Centro			Project Cost Estimate (Year of	Existing Funding (Year of	OW.		170	I - Bond and		auann	Funding (Includes Match for Trade	
Set   Set   Act			award)	award)	CMIA	Trade	115	2008 RTIP	I - Bond	SHOPP	Category)	Comments
State Route 32 Certificer   Inseptition   State   St												
No.   Sol   12 Junean Carpon Wildering from 2 to 4 Junes   \$ 133,000   \$ 17,400   \$ 88,800   \$ 27,000   \$ 20			\$ 335,000	\$ 235,000	\$ 85,000			\$ 15,000				
Sol.												
State Review 24/1-880 Controller Control Costal Alternation   \$ 20,000   \$ 21,000   \$ 175,000   \$ 2,000   \$ 20,000   \$		SR 12 Jameson Canyon Widening from 2 to 4 Lanes	\$ 133,000	\$ 17,400	\$ 88,600			\$ 27,000				
CC   Sept. 24 - Statement from North Main Street in Visitud   S   2,000   S   S   10,000   S   S   S   10,000   S   S   S   S   S   S   S   S   S		oute 24/I-680 Corridor: Contra Costa/Alameda										
CC   Creek to SR 22		SR 24 Caldecott Tunnel 4th Bore	\$ 420,000	\$ 216,000	\$ 175,000			\$ 29,000				
SOL	СС	Creek to SR 242	\$ 21,000	\$ -	\$ 10,500			\$ 10,500				
Section   Sect	I-80 Co											
Alice   180 Integrated Corridor Mobility		Extension			\$ 150,000				\$ 50,000			
No.   10   10   10   10   10   10   10   1		I-80 Cordelia Truck Scales	\$ 99,600	\$ -		\$ 49,800					\$ 49,800	Proposed \$49.8 M AB1171 Toll Match
SM   US 101 Additional lances from Martin Rd to SR 85, Including   \$ 271,076   \$ 66,650   \$ 194,426   \$ 5 10,000   \$ 5 13,000   \$ 13,000   \$	CC		\$ 87,700	\$ -	\$ 63,300		\$ 24,400					\$24.4 M local ITS for San Pablo Avenue improvements
SCL   Willow IIC		LIS 101 Additional lanes from March Rd to SR 85, including										
Sect		Willow I/C	\$ 271,076	\$ 66,650	\$ 194,426			\$ 10,000				
SF   US 101 South Access to Golden Gate Bridge: Doyle Drive   \$810,000   \$155,271   \$175,000   \$54,000   \$375,000   \$50,729   State with CMAI and STORE Bridge and SR 1 along 19th AvoPark Presidio   \$51,600   \$30,00		280/I-680	\$ 104,220	\$ 61,220	\$ 30,000			\$ 13,000				
SF   Replacement   S   S   O   S   S   C   S   S   S   S   S   S   S	US 101											Race replacement cost of \$550 M covered by
Second   S	SF		\$ 810,000	\$ 155,271	\$ 175,000			\$ 54,000		\$ 375,000	\$ 50,729	State with CMIA and SHOPP; remainder future federal, RTIP and Prop K.
MRN   US 101 Marin-Sonoma Narrows: HOV Extension from Atherton   Ave in Novato to south of Petaluma River Bridge and HOV   \$ 379,000 \$ 67,000 \$ 170,000   \$ 52,000 \$ 50,000   \$ 40,000   Other includes future federal future	SF	SFGo: Corridor Management on US 101 between Golden Gate Bridge and Bay Bridge and SR 1 along 19th Ave/Park Presidio	\$ 51,600	\$ 21,600			\$ 30,000					
Name   Ave in Novato to south of Petaluma River Bridge and HOV   \$ 379,000   \$ 67,000   \$ 170,000   \$ 52,000   \$ 50,000   \$ 40,000   Other includes future federal fix	MRN	I-580 WB to US 101 NB Auxiliary Lane	\$ 20,000	\$ -	\$ 20,000							
SON   US 101 HOV Extension from Steele Lane to Windsor River   Road (North Phase A and B)		Ave in Novato to south of Petaluma River Bridge and HOV	\$ 379,000	\$ 67,000	\$ 170,000			\$ 52,000	\$ 50,000		\$ 40,000	Other includes future federal funds - \$40.0M
Sol   Road (North Phase A and B)   Sile,000   Sile,00	SON	US 101 HOV Extension from Railroad Ave to Santa Rosa Ave	\$ 193,090	\$ 108,042	\$ 85,848							
ALA   I-580 HOV Lanes from Hacienda/Foothill to Greenville Including Isabel / SR 84/I-580 I/C Improvements   \$ 452,100 \$ 131,000 \$ 294,100   \$ 50,000		Road (North Phase A and B)	\$ 166,000	\$ 71,000	\$ 95,000							
ALA   I-580 EB Truck Climbing Lane Over Altamont   \$ 100,000 \$ - \$ 50,000   \$ 50,000	I-580/I-											
SJ   -205/I-580 Altamont Pass Westbound Truck Lane   \$ 100,000   \$ - \$ \$ 50,000   \$ 50,000   \$ 50,000   \$ 50,000     I-880 Corridor: Alameda/Santa Clara   \$ 100,000   \$ - \$ 12,700   \$ 15,000   \$ 15,000   \$ 15,000     SCL   I-880/280 Interchange (Stevens Creek Boulevard and Winchester Off-ramps)   \$ 70,000   \$ 12,500   \$ 50,000   \$ 7,500   \$ 7,500   \$ 108,000   \$ 12,800   \$ 108,000   \$	ALA		\$ 452,100	\$ 131,000	\$ 294,100					\$ 27,000		
1-880 Corridor: Alameda/Santa Clara   1-880 HOV Extension from SR 237 in Milpitas to US 101 in San   142,700   \$ - \$ 127,700   \$ 15,000   \$ 1	ALA	I-580 EB Truck Climbing Lane Over Altamont	\$ 100,000	\$ -		\$ 50,000					\$ 50,000	•
February	SJ	I-205/I-580 Altamont Pass Westbound Truck Lane	\$ 100,000	\$ -		\$ 50,000					\$ 50,000	Proposed \$50 M Match - San Joaquin County Sales Tax
SCL   Jose   \$ 142,700   \$ - \$ 127,700   \$ 15,000   \$ 15,000   \$ 12,500   \$ 50,000   \$ 7,500   \$   \$ 1,500   \$	I-880 C											
SCL   Winchester Off-ramps   \$ 70,000 \$ 12,500 \$ 50,000   \$ 7,500   \$ 7,500   \$ 108,000	SCL		\$ 142,700	\$ -	\$ 127,700			\$ 15,000				
ALA   I-880 Operational and Safety Improvements at 23rd and 29th   \$ 91,000 \$ 12,000 \$ 39,500 \$ 39,500 \$ 39,500 \$ \$ 39,500   \$ 39,500   \$ Regional System Management   \$ 101,900 \$ 101,9	SCL	I-880/280 Interchange (Stevens Creek Boulevard and Winchester Off-ramps)	\$ 70,000	\$ 12,500	\$ 50,000			\$ 7,500				
Regional System Management  REG Regionwide System Management \$ 101,900 \$ 101,900  Total	ALA	(includes TSM components)	\$ 108,000	\$ -	\$ 108,000							
REG         Regionwide System Management         \$ 101,900 <td></td> <td>Ave</td> <td>\$ 91,000</td> <td>\$ 12,000</td> <td></td> <td>\$ 39,500</td> <td></td> <td></td> <td></td> <td></td> <td>\$ 39,500</td> <td>Proposed \$39.5M Match - TBD</td>		Ave	\$ 91,000	\$ 12,000		\$ 39,500					\$ 39,500	Proposed \$39.5M Match - TBD
Total												
	REG	Regionwide System Management	\$ 101,900		\$ 101,900							
Total: \$ 4,580,398   \$1,298,095   \$ 2,024,374   \$ 189,300   \$ 54,400   \$ 233,000   \$ 100,000   \$ 402,000   \$ 280,029	Total											
		Total: \$	\$ 4,580,398	\$ 1,298,095	\$ 2,024,374	\$ 189,300	\$ 54,400	\$ 233,000	\$ 100,000	\$ 402,000	\$ 280,029	

Date: January 10, 2007

W.I.: 1515 Referred by: PAC

#### **ABSTRACT**

Resolution No. 3792

This resolution adopts the Corridor Mobility Improvement Account (CMIA) Program of Projects for the San Francisco Bay Area for submission to the California Transportation Commission (CTC).

Further discussion of this action is contained in the MTC Executive Director's Memorandum dated January 10, 2007.

Attachment 1 – MTC CMIA Program of Projects

Date: January 10, 2007

W.I.: 1515 Referred by: PAC

RE: Adoption of Corridor Mobility Improvement Account Program of Projects

### METROPOLITAN TRANSPORTATION COMMISSION RESOLUTION NO. 3792

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to Government Code Section 66500 *et seq.*; and

WHEREAS, MTC has adopted, pursuant to Government Code Sections 66508 and 65080, a Regional Transportation Plan (RTP); and

WHEREAS, MTC biennially adopts, pursuant to Government Code Section 65080, a Regional Transportation Improvement Program (RTIP) that is submitted, pursuant to Government Code Section 14527, to the California Transportation Commission (CTC) and the California Department of Transportation (Caltrans); and

WHEREAS, Senate Bill 1266 (2006) establishes the Corridor Mobility Improvement Account (CMIA) as part of the Highway, Safety, Traffic Reduction, Air Quality, and Port Security Fund of 2006 and MTC is the designated agency for the San Francisco Bay Area to submit projects to the CTC by January 16, 2007 for the CMIA account; and

WHEREAS, the Corridor Mobility Improvement Account Guidelines are consistent with Senate Bill 1266 (2006) and the CMIA program guidelines adopted by the CTC and will be used by the Commission to select a program of projects for the CMIA; and

WHEREAS, the Corridor Mobility Improvement Account Guidelines were developed and approved in MTC Resolution No. 3785; and

WHEREAS, MTC has developed, in cooperation with Caltrans, Congestion Management Agencies, and local governments, a Program of Projects for the CMIA Program for submission and consideration by the CTC; and

WHEREAS, the CTC requires all sponsors of CMIA-funded projects to submit or commit to developing and implementing a corridor system management plan as a part of the CMIA project submission in order to preserve project mobility gains; and

WHEREAS, MTC has initiated, in cooperation with Caltrans, the Freeway Performance Initiative, which will establish appropriate corridor and system management strategies based on performance assessment and congestion reduction; and

WHEREAS, many projects in the proposed CMIA Program include RTIP funds and the inclusion of such funding constitutes a commitment by MTC and the Congestion Management Agencies of county shares toward the funding packages for the projects; and

WHEREAS, a public comment and input period was held between December 20, 2006 and January 5, 2007 on the proposed Program of Projects for the CMIA Program; and

WHEREAS, MTC's Programming and Allocations Committee has considered public comments and input and recommends adoption of the CMIA Program of Projects; now, therefore, be it

<u>RESOLVED</u>, that MTC adopts the CMIA Program of Projects, attached hereto as Attachment '1' and incorporated herein as though set forth at length, and finds it consistent with the RTP or proposed changes to the RTP; and, be it further

<u>RESOLVED</u>, that MTC's adoption of the CMIA Program of Projects is for planning purposes only, with each project still subject to MTC's project review and application approval pursuant to MTC Resolution Nos. 3115 and 3075; and, be it further

<u>RESOLVED</u>, that MTC commits to working cooperatively with Caltrans and projects sponsors in developing and implementing a corridor system management plan for all corridors submitted for CMIA funding consideration; and, be it further

RESOLVED, that MTC commits to the RTIP funding amounts identified in the submitted CMIA Program of Projects for all projects selected for CMIA funding by the CTC; and, be it further

<u>RESOLVED</u>, that the Executive Director shall forward a copy of this resolution, and such other information as may be required to the CTC, Caltrans, and to such other agencies as may be appropriate.

METROPOLITAN TRANSPORTATION COMMISSION

Jon Rubin, Chair

The above resolution was entered into by the Metropolitan Transportation Commission at a regular meeting of the Commission held in Oakland, California, on January 10, 2007

Date: January 10, 2007

W.I.: 1515 Referred by: PAC

> Attachment 1 Resolution No. 3792

# **Corridor Mobility Improvement Account (CMIA) Program of Projects and Companion Funding Strategy**

**Project List** 

Date: January 10, 2007 W.I.: 1515 Referred by: PAC

# Attachment 1 CMIA Project Recommendations and Companion Funding Strategy

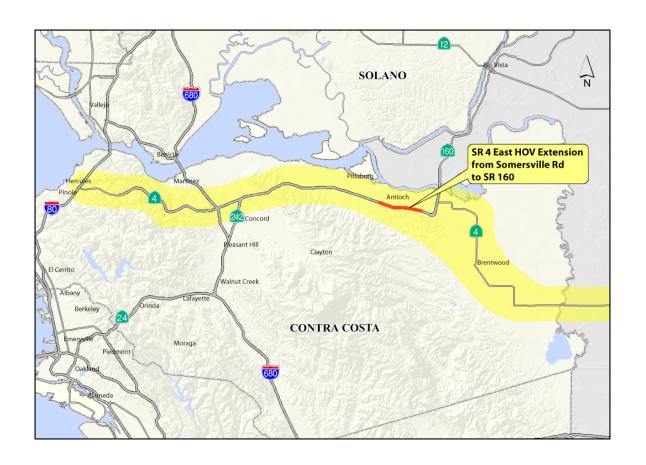
Attachment 1
Resolution No. 3792

				(all f	unding in thousand	-,					<u>,                                      </u>
					P	roposition 1B	State Funds				
County	Project	Total Project Cost Estimate (Year of award)	Prior and Existing Funding (Year of award)	СМІА	Trade	ITS	RTIP I - Bond and 2008 RTIP	ITIP I - Bond	SHOPP	Other New Funding (Includes Match for Trade Category)	Comments
State R	oute 4 Corridor: Contra Costa										
CC	SR4-East HOV Extension from Somersville Rd to SR 160	\$ 335,000	\$ 235,000	\$ 85,000			\$ 15,000				
State R	oute 12 Corridor: Napa/Solano										
NAP SOL	SR 12 Jameson Canyon Widening from 2 to 4 Lanes	\$ 133,000	\$ 17,400	\$ 88,600			\$ 27,000				
	oute 24/I-680 Corridor: Contra Costa/Alameda										
ALA CC	SR 24 Caldecott Tunnel 4th Bore	\$ 420,000	\$ 216,000	\$ 175,000			\$ 29,000				
CC	I-680 NB HOV Extension from North Main Street in Walnut Creek to SR 242	\$ 21,000	\$ -	\$ 10,500			\$ 10,500				
I-80 Co	rridor: Alameda/Contra Costa/Solano										
SOL	I-80/I-680/SR 12 Interchange (Second Phase) and I-80 HOV Extension	\$ 323,412	\$ 123,412	\$ 150,000				\$ 50,000			
SOL	I-80 Cordelia Truck Scales	\$ 99,600	\$ -		\$ 49,800					\$ 49,800	Proposed \$49.8 M AB1171 Toll Match
ALA CC	I-80 Integrated Corridor Mobility	\$ 87,700	\$ -	\$ 63,300		\$ 24,400					\$24.4 M local ITS for San Pablo Avenue improvements
	Corridor: San Mateo/Santa Clara										
SM SCL	US 101 Additional lanes from Marsh Rd to SR 85, including Willow I/C	\$ 271,076	\$ 66,650	\$ 194,426			\$ 10,000				
SCL	US 101 Widening and Interchanges from Yerba Buena to I-280/I-680	\$ 104,220	\$ 61,220	\$ 30,000			\$ 13,000				
US 101	Corridor: San Francisco/Marin/Sonoma										
SF	US 101 South Access to Golden Gate Bridge: Doyle Drive Replacement	\$ 810,000	\$ 155,271	\$ 175,000			\$ 54,000		\$ 375,000	\$ 50,729	Base replacement cost of \$550 M covered by State with CMIA and SHOPP; remainder future federal, RTIP and Prop K.
SF	SFGo: Corridor Management on US 101 between Golden Gate Bridge and Bay Bridge and SR 1 along 19th Ave/Park Presidio	\$ 51,600	\$ 21,600			\$ 30,000					
MRN	I-580 WB to US 101 NB Auxiliary Lane	\$ 20,000	\$ -	\$ 20,000							
MRN SON	US 101 Marin-Sonoma Narrows: HOV Extension from Atherton Ave in Novato to south of Petaluma River Bridge and HOV Lane Conversion through Novato	\$ 379,000					\$ 52,000	\$ 50,000		\$ 40,000	Other includes future federal funds - \$40.0M
SON	US 101 HOV Extension from Railroad Ave to Santa Rosa Ave	\$ 193,090	\$ 108,042	\$ 85,848							
SON	US 101 HOV Extension from Steele Lane to Windsor River Road (North Phase A and B)	\$ 166,000	\$ 71,000	\$ 95,000							
I-580/I-	238 Corridor: Alameda I-580 HOV Lanes from Hacienda/Foothill to Greenville Including										
ALA	Isabel / SR 84/I-580 I/C Improvements		\$ 131,000	\$ 294,100					\$ 27,000		
ALA	I-580 EB Truck Climbing Lane Over Altamont	\$ 100,000	\$ -		\$ 50,000					\$ 50,000	Proposed \$50 M Match TBD Proposed \$50 M Match - San Joaquin County
SJ	I-205/I-580 Altamont Pass Westbound Truck Lane	\$ 100,000	\$ -		\$ 50,000					\$ 50,000	Sales Tax
I-880 C	orridor: Alameda/Santa Clara										
SCL	I-880 HOV Extension from SR 237 in Milpitas to US 101 in San Jose	\$ 142,700	\$ -	\$ 127,700			\$ 15,000				
SCL	I-880/280 Interchange (Stevens Creek Boulevard and Winchester Off-ramps)	\$ 70,000	\$ 12,500	\$ 50,000			\$ 7,500				
ALA	I-880 SB HOV Extension from 98th Ave to Marina Ave (includes TSM components)	\$ 108,000	\$ -	\$ 108,000							
ALA	I-880 Operational and Safety Improvements at 23rd and 29th Ave	\$ 91,000	\$ 12,000		\$ 39,500					\$ 39,500	Proposed \$39.5M Match - TBD
Region	al System Management										
REG	Regionwide System Management	\$ 101,900		\$ 101,900							
Total											
	Total:	\$ 4,580,398	\$ 1,298,095	\$ 2,024,374	\$ 189,300	\$ 54,400	\$ 233,000	\$ 100,000	\$ 402,000	\$ 280,029	



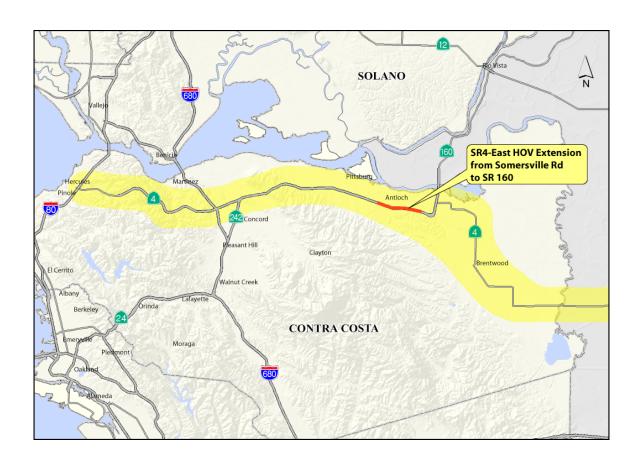
### Metropolitan Transportation Commission Corridor Mobility Improvement Account Program of Projects

#### **State Route 4 Corridor: Contra Costa**



### **Project Location Map**

### **State Route 4 East HOV Extension From Somersville to SR-160**



#### CMIA PROJECT NARRATIVE

#### SR 4 East Widening from Somersville Road to SR160

#### **Travel Corridor Description**

SR 4 is included in California's Freeway and Expressway System and has been identified by the State as an Interregional Road System route between the eastern limits of Antioch and SR 89 near the Nevada border. It is an important statewide east-west inter-regional route providing connectivity from I-80 in Hercules across Contra Costa County to San Joaquin County. The SR 4 corridor consists of a freeway facility, extending from I-80 to SR160, at which point SR 4 subsequently becomes a conventional highway through a major growth area of the region. It is approximately 30 miles in length and intersects with I-680 and SR 242.

In addition to being the major regional approach for recreational traffic to the Sacramento-San Joaquin Delta region, SR 4 has become one of the region's major commute arterials. Regional rail (BART) currently extends through the median along a portion of SR 4. There are long-term plans to extend BART to Antioch near SR 160. There is also bus service in the SR 4 corridor.

Over the last two decades, virtually the entire length of Route 4 in the Bay Area has been reconstructed through a series of projects, except for a stretch at the eastern edge of Contra Costa County. The freeway has been widened and HOV lanes added between Route 242 to Loveridge Road. These improvements have largely been funded with local sales tax revenues, contributing 83% of the \$383 million of improvements to date.

#### **Project Function**

The project proposed for partial CMIA funding would complete the last remaining freeway widening and HOV lane extension to the east, where it would connect with a new Route 4 Bypass already under construction. SR 4 would be widened between Somersville Road and SR 160, HOV lanes would be extended east to the SR 4 Bypass, and five interchanges would be reconstructed. The purpose of the project is to alleviate traffic delays, improve operations, and enhance safety by widening, reconstructing interchanges and including HOV lanes in each direction. Phase 1 will include an eightlane widening from Somersville Road to west of A Street/Lone Tree Way, a six-lane widening from A Street/Lone Tree Way to the proposed SR 4 Bypass, and reconstruction of the interchanges at Somersville Road, Contra Loma, and G Street. Phase 2 will include the reconstruction of the A Street/Lone Tree Way interchange. The scope also includes widening from six to eight lanes to west of Hillcrest Ave. Phase 3 will include the reconstruction of the Hillcrest interchange.

#### **Project Benefits**

#### A. Operations and Safety

SR 4 is the sixth most congested freeway in the Bay Area, with motorists experiencing about 9,000 vehicle-hours of delay per day. This section of the SR 4 corridor experiences

an AADT volume of approximately 101,000 vehicles. Truck traffic accounts for approximately 5% to 6% of the peak hour traffic volume over the project corridor. Commercial and residential development in East Contra Costa County have continued without corresponding improvements on freeway, local streets, and transit systems. The proposed project would alleviate existing and reduce future traffic congestion, accommodate future travel demand, reduce vehicular traffic on local streets, reduce travel time and delay, encourage use of carpooling during peak travel hours, and improve travel reliability for freight.

The project would improve safety by reconstructing interchanges and improving standards on the freeway. Implementation of ramp metering will decrease peak period congestion and smooth traffic flows entering the freeway thereby reducing accidents.

#### B. Air Quality

Contra Costa County is part of the San Francisco Bay Area Air Quality Basin. The region currently meets the National attainment standards for Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter ( $PM_{10}$ ), fine Particulate Matter ( $PM_{2.5}$ ), and lead. However, the Region does not meet the current state standards for Ozone,  $PM_{10}$  and  $PM_{2.5}$ , but is in attainment for the other pollutants listed above. The projected reductions in daily vehicle hours of delay from this project will have a beneficial effect on air quality, as motorist travel times and speeds increase, significant reductions in air pollutant emissions will be attained.

#### C. Access to Jobs, Housing, Markets, and Commerce

Residential development predominates in the SR 4 Corridor, with continuing low-density suburban style residential growth in the eastern part of the corridor. BART was extended to Bay Point in 1997 and serves commuters to the East Bay and San Francisco. SR 4 provides residents with additional rail connections at the Concord BART station, as well as the Amtrak-Capitol Corridor station in Martinez. SR 4 also intersects with I-680 and SR 160. Due to current capacity constraints and growing congestion, local roads such as Bailey, Kirker Pass and Vasco have seen significant increases in traffic.

The SR 4 East Corridor has witnessed above average growth in both population and housing. Over the past twenty years, more than 30% of growth in Contra Costa County has occurred in this one Corridor. This development has been spurred on by high housing prices in Central Contra Costa County as well as core Bay Area cities. This, together with improvements to SR 4 and SR 24, has made commuting from eastern Contra Costa increasingly attractive. While the growth in the Corridor has attracted substantial retail businesses, other employment opportunities remain outside the Corridor. Commercial and employment development are chiefly in the Central (I-680) and Western (I-80) travel corridors of Contra Costa County.

#### **Project Risks**

The project is divided into three distinct phases which are dependent on the availability of funding. The project also has an aggressive project schedule. The Measure J bonds,

acquired by CCTA have a "spend-down" clause that requires funds to be spent by the end of 2009. If this timetable is not met, a penalty will be imposed.

Right of way utilities are expected to be relocated prior to construction. Any delay in the utility work would impact the project schedule. There are high & low risk utilities involved. The required right of way acquisition for the corridor widening will impact businesses and homes. Condemnation is also expected for some properties.

Various permits are required for the project, such as permits from the US Corps of Engineers, Fish & Game, US Fish & Wildlife Service, Contra Costa County Flood Control District, and the California Bureau of Reclamation.

#### Corridor System Management Plan/Preserving Project Mobility

Caltrans District 4 and the Metropolitan Transportation Commission have recently launched a joint effort entitled the Freeway Performance Initiative. The intent of this effort is to advance a corridor based and performance driven Transportation Planning process, employing tested System Management principles and strategies to maximize the efficiency of the existing transportation infrastructure. SR 4 is one of the 12 "Key Corridors" identified for analysis and development of a Corridor System Management Plan over the next 18 months.

The availability of HOV lanes through the most heavily traveled 14 miles of the corridor will play a large part in preserving mobility gains. By offering a significant timesavings to HOV lane users, it will increase the likelihood that growth in peak period travel demand on this corridor will be accommodated by transit or carpools, rather than single-occupant vehicles. In this corridor, existing mainline HOV lanes have been in operation since 2000 when the westbound lane was opened from west of Railroad Avenue to Port Chicago Highway. The HOV lane in the eastbound direction opened in 2001 within the same limits. Construction to install HOV lanes from west of Railroad Avenue to west of Loveridge has recently been completed. There is also a project to extend the HOV lanes from Loveridge Road to Somersville Road currently in the final design phase that will begin construction in spring 2008.

All projects on this corridor have installed the requisite TOS elements to provide traffic monitoring, motorist information and incident management capabilities. The development of the Corridor System Management Plan will include a detailed assessment of the feasibility of ramp metering on SR 4, which to date has not been supported by local agencies along the corridor due to the lack of alternate routes. Metering hardware has been included as part of every project along the corridor.

In order to better manage the impacts of new residential development in East Contra Costa County, home purchasers are now assessed a fee (currently \$15,000 for each new single family home) which is dedicated to construction of the new Route 4 Bypass. In addition to the significant local investment in Route 4, extensions of transit further east are being pursued, through variations of BART service and examination of smart growth alternatives for land adjacent to transit stations.

#### **APPENDIX A**

#### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

#### **Project Nomination Fact Sheet**

Nominating Agenc	Nominating Agency: Contra Costa Transportation Authority (CCTA) Fact Sheet Date:										
Contact Person	Susan Miller										
Phone Number	(925) 256-4736	Fax Number	(925) 407-0128								
Email Address	pmaxwell@ccta.net										

County	Caltrans District	PPNO *	EA *	Region/MI	PO/TIP ID*	Route / Corridor *	Post Mile Back *	Post Mile Ahead *
Contra Costa	4	0192F	228511	CC-0	30028	4	24.5	29.6
* NOTE: PPNO & EA as:	signed by Cal	trans. Region/M	PO/TIP ID assign	ed by RTPA/MP	D. Route/Corridor	& Post Mile Bad	ck/Ahead used for Stat	e Highway System.
Legislative Districts	Senate:	7			Congressional:	7		
Legislative Districts	Assembly:	11						
Implementing Agency	PA&ED:	CCTA			PS&E: Caltr	ans/CCTA		
(by component)	R/W:	Caltrans/CCT/	4		CON: Caltr	ans/CCTA		
Project Title	State Ro	ute 4 East H	IOV Extension	on Widening	from Somers	sville Rd to	State Route 160	

Location - Project Limits - Description and Scope of Work (Provide a project location map on a separate sheet and attach to this form)

Antioch: Widen SR-4 East to eight lanes (3 lanes + HOV in each direction) from Somersville Rd to Hillcrest Avenue (plus auxiliary lanes) and to six lanes (3 mixed flow lanes in each direction) from Hillcrest Avenue to the interchange with SR-160 and the new SR-4 bypass. The total project length is approximately 5.1 miles. The widening project includes reconstruction of: Somersville Rd. Interchange; Contra Loma/L Street Interchange; G Street Overcrossing; Lone Tree Way/A Street Interchange; Cavallo Rd under crossing; and Hillcrest Avenue Interchange.

#### Description of Major Project Benefits

The project will improve safety and reduce traffic congestion on SR-4 by providing two additional through lanes in both the east bound and the westbound directions, as well as the inclusion of auxiliary lanes. This project will increase the use of the carpool lanes on SR-4 by continuing the carpool lanes to Hillcrest Avenue. Once constructed, the carpool lane network on SR-4 will extend from SR-242 in Concord to Hillcrest Avenue in Antioch, over 14 miles.

Expected Source(s) of Additional Funding Necessary to Complete Project - as Identified Under 'Additional Need'

Project Delivery Milestones (month/year):	
Project Study Report (PSR) complete	February 2000
Notice of Preparation Document Type: ND/IS/EA	Fall 2001
Begin Circulation of Draft Environmental Document	October 2004
Final Approval of Environmental Document	July 2005
Completion of plans, specifications, and estimates	March 2009*
Right-of-way certification	July 2009 *
Ready for advertisement	July 2009 *
Construction contract award	November 2009 *
Construction contract acceptance	December 2013 *
* Project will be constructed in stages. PSE, R/W cert. and Cons	st. start dates for final stage will be a year later. Completion dates shown are for first stage.

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

### CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan

(dollars in thousands and escalated)

Shaded fields are automatically calculated. Please do not fill these fields.

				Date:	11-Jan-07
County	CT District	PPNO *	EA*	Region/MF	PO/TIP ID *
Contra Costa	4	0192F	228511	CC-0	30028
Project Title:	State Route 4	East HOV Extension Wide	ning from Somersville Rd to State Route	160	

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	ject Cost								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13 +	Total	
E&P (PA&ED)	0	0	0	0	0	0	0	0	
PS&E	9,700	13,400	0	0	0	0	0	23,100	
R/W SUP (CT) *	0	0	0	0	0	0	0	0	
CON SUP (CT) *	0	0	0	20,000	13,700	0	0	33,700	
R/W	3,011	33,489	7,400	0	0	0	0	43,900	
CON	0	0	0	168,000	66,300	0	0	234,300	
TOTAL	12,711	46,889	7,400	188,000	80,000	0	0	335,000	

Corridor Manageme	ent Improvem	ent Account	(CMIA) Prog	ram				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E		9,100						9,100
R/W SUP (CT) *								0
CON SUP (CT) *				2,000				2,000
R/W		27,900						27,900
CON				46,000				46,000
TOTAL	0	37,000	0	48,000	0	0	0	85,000

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:	Local Sales	s Tax, Meas	sure C					
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E	8,100	4,300						12,400
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W	3,011							3,011
CON								0
TOTAL	11,111	4,300	0	0	0	0	0	15,411

Funding Source:	Local Sale	s Tax, Mea	sure J					
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *				18,000				18,000
R/W			7,400					7,400
CON				107,000				107,000
TOTAL	0	0	7,400	125,000	0	0	0	132,400

Funding Source:	Local Deve	elopment Fe	es, ECCR	FFA				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13 +	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *					13,700			13,700
R/W								0
CON					66,300			66,300
TOTAL	0	0	0	0	80,000	0	0	80,000

Shaded fields are automatically calculated. Please do not fill these fields.

#### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan**

(dollars in thousands and escalated)

	Shaded f	fields are autor	matically calc			se fields.		
							Date:	11-Jan-07
County	CT District	PPN	IO *		EA*		Region/MP	O/TIP ID *
Contra Costa	4	019			228511		CC-03	
Project Title:	State Route 4	East HOV Ex	tension Wide	ning from Sor	nersville Rd to	State Route	160	
* NOTE: PPNO and EA as	ssigned by Caltrans.	Region/MPO/TIP	ID assigned by RT	PA/MPO				
<b>Funding Source:</b>	SAFETEA-	·LU (Federa	ıl Earmarks	5)				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E	1,600							1,600
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	1,600	0	0	0	0	0	0	1,600
	,,,,,,			-	-			,
Funding Source:	State Trans	sportation Ir	nprovemer	nt Program	(STIP) - RI	P - Existing	<u> </u>	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	1	- 100			27 1 1	–		0
PS&E								0
R/W SUP (CT) *							1	0
CON SUP (CT) *	1							0
R/W		5,589						5,589
CON		0,000						0,000
TOTAL	0	5,589	0	0	0	0	0	5,589
TOTAL	J	0,000	•	•			<u> </u>	0,000
Funding Source:	State Trans	sportation Ir	mnrovemer	nt Program	- RIP - Nev	(Contra C	(neta)	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	1 1101	01/00	00/03	03/10	10/11	11/12	12/10	0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W	+						1	0
CON	+			15,000			1	
TOTAL	0	0	0	15,000	0	0	0	15,000 15,000
TOTAL	U	U	U	15,000	U	U	U	15,000
Eunding Course:								1
Funding Source:	Prior	07/00	00/00	00/40	10/11	11/10	10/10	Total
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	
E&P (PA&ED) PS&E	+							0
								0
R/W SUP (CT) *								0
CON SUP (CT) *	1							0
R/W	1							0
CON			_					0
TOTAL	0	0	0	0	0	0	0	0
Additional Funding				•				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13+	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL			_	_				

<sup>\*</sup> All costs in year of award dollars. Construction based cost estimates have been prepared and escalated to midpoint of construction using 3.5% escalation rate. \*\* \$15 Million in RIP Funds committed by Contra Costa in 2006 STIP Augmentation.

Shaded fields are automatically calculated. Please do not fill these fields.

### BASIS OF PROJECT SCOPE, COST, SCHEDULE, AND BENEFITS SR 4 WIDENING FROM SOMERSVILLE ROAD TO SR 160

#### Project Scope

- o The scope of this project was developed based on the July 2006 approved Project Report. The project scope included the following elements.
  - Widen to from four to eight lanes between Somersville Road and Hillcrest Avenue and from four to six lanes from Hillcrest Avenue to the SR Bypass
  - The widening will accommodate a HOV lane in each direction and the interchanges within the project limits will also be reconstructed
  - The project is divided into three phases as listed below:
    - Phase 1: Eight-lane widening from Somersville Road to west of A Street/Lone Tree Way, Six-lane widening from A Street/Lone Tree Way to the proposed SR4 Bypass, and reconstruction of the interchanges at Somersville Road, Contra Loma, and G Street
    - Phase 2: Construction of the A Street/Lone Tree Way interchange. The scope also includes widening from six to eight lanes to west of Hillcrest Ave.
    - o Phase 3: Construction of the Hillcrest interchange

#### Project Cost Estimate

- o The project estimate was developed based on the following factors:
  - Construction Cost Estimate and Support Costs are in 2004 dollars and have been updated to reflect current costs.
  - Construction Cost Estimate includes 25% contingency
  - Construction cost is escalated @ 3.5% to mid construction.
  - Construction period is from 2009 to 2014
  - Construction Engineering and Management Costs are 15.5% of the Construction Capital Cost Estimate
  - Construction Engineering and Management Costs are escalated at 3.5% per year to the middle of the construction period (From 2009 to 2014)

#### Project Schedule

O The project schedule was developed based on the information from the approved Project Report and environmental document (ND/FONSI). It assumes approximately three years for the design and right of way acquisition work for each phase. Currently, design and right of way for Phase 1 is underway. The design and right of way work for the second and third phases will begin once this project is selected as part of the CMIA. The planned project schedule is as follows:

	PAED (COMPLETED)	PS&E	RTL	BEGIN CONSTRUCTION	END CONSTRUCTION
Phase 1	July 6, 2006	March 2009	July 2009	November 2009	December 2013
Phase 2	July 6, 2006	March 2010	July 2010	November 2010	December 2014
Phase 3	July 6, 2006	March 2010	July 2010	November 2010	December 2014

#### Project Benefits:

- o The project benefits were derived from the following documents:
  - Approved Project Report
  - Transportation 2030 Plan for the San Francisco Bay Area FINAL February 2005

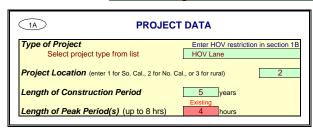
RTP (T2030) PROJECT DESCRIPTION	PAGE	ID#
CC4 Widen Route 4 from 4 lanes to 8 lanes from Somersville Road to Route 160	94	98999

(See Project Narrative for a detailed description of the project benefits)

#### Project Contingency Funding

The project cost estimate was developed based on the approved Project Report. A 3.5% construction cost escalation rate extended to mid year of construction was used. Should the project cost increases, funding for the increase will be secured from future STIP or local funding sources.

District:	4	Project #	35a
		EA:	228511
PROJECT:	SR4 East Widening From Somersville to SR160 - Widening and HOV Somersville to Hillcrest	PPNO:	0192F



Highway Design	Existing	New
Number of General Traffic Lanes	4	6
Number of HOV Lanes	0	2
HOV Restriction (2 or 3)	2	
Highway Free-Flow Speed	65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	3.2	3.2
Affected Area	3.2	3.2
Average Daily Traffic Current	101,000 w/o Project	w/ Project
Base (Year 1)	123,083	123,083
Forecast (Year 20)	207,000	207,000
Average Hourly HOV Traffic (if HOV lanes)	1,649	1,649
Percent Traffic in Weave (if oper. improvement)	F 70/	5.7%
Percent Trucks (include RVs, if applicable)	5.7%	5.7%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		
	1	l .

Actual 3-Year Accident Data for Facility				
	Count (No.)	Rate		
Fatal Accidents	4	0.01		
Injury Accidents	282	0.80		
Property Damage Only (PDO) Accidents	496	1.40		
	•			
Statewide Average for Highway Classificat	ion			
Statewide Average for Highway Classificat	Existing	New		
Statewide Average for Highway Classificat  Accident Rate (per million vehicle-miles)		New 0.57		
Statewide Average for Highway Classificat  Accident Rate (per million vehicle-miles)  Percent Fatal Accidents	Existing			

#### TOTAL CMIA PROJECT COSTS (in escalated dollars)

act Sheet:	
_	
ır:	
\$ 10,908,000	
,,	
\$ 24,816,750	
\$ 33,000,000	
\$ 51,620,250	
\$ 66,975,000	
\$ 251,250,000	
3.5%	
	\$ 24,816,750 \$ 33,000,000 \$ 51,620,250 \$ 40,500,000 \$ 66,975,000 \$ 251,250,000

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

Prepare Model for Second Road

District:	4	Project #	35b
		EA:	228511
PROJECT:	SR4 East Widening From Somersville to SR160 - Widening Hillcrest to SR 4 Bypass	PPNO:	0192F

General Highway
or 3 for rural)
5 years
4 hours

1B HIGHWAY DESIGN AND TRAF	FIC DAT	Δ.
		New
Highway Design Number of General Traffic Lanes	Existing	
Number of General Traffic Lanes Number of HOV Lanes	4	6
	0	0
HOV Restriction (2 or 3)	0	
Highway Free-Flow Speed	65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	1.3	1.3
Affected Area	1.3	1.3
Allected Alea	1.0	1.0
Average Daily Traffic		
Current	83,000	
Guitent	w/o Project	w/ Project
Base (Year 1)	89,461	89,461
Forecast (Year 20)	114,012	114,012
Average Hourly HOV Traffic (if HOV lanes)	,012	0
Percent Traffic in Weave (if oper. improvement)		
Percent Trucks (include RVs, if applicable)	5.7%	5.7%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		
у		
-		

1C HIGHWAY ACCIDENT DATA				
Actual 3-Year Accident Data for Facility				
Count (No.) Rate				
Fatal Accidents	4	0.03		
Injury Accidents	282	2.39		
Property Damage Only (PDO) Accidents	496	4.20		
Statewide Average for Highway Classificati	on			
	Existing	New		
Accident Rate (per million vehicle-miles)	0.82	0.57		
Percent Fatal Accidents	1.3%	0.6%		
Percent Injury Accidents	35.7%	32.5%		

	]

#### TOTAL CMIA PROJECT COSTS (in escalated dollars)

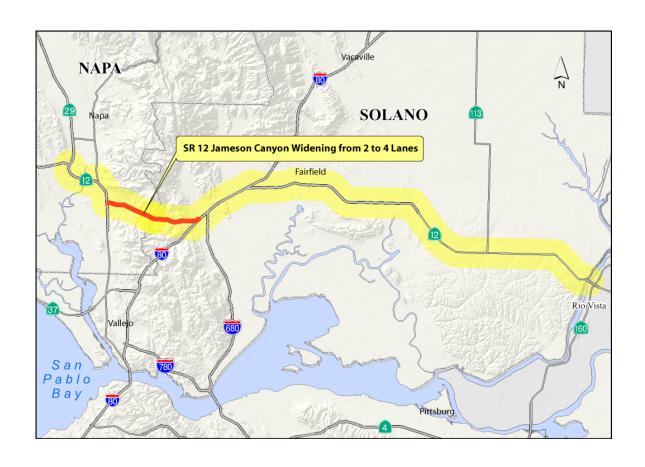
From Project Nomination Fac	ct S	heet:	
			ļ
Fiscal Year	r:		ļ
Before	\$	3,636,000	ļ
2007-08	\$	7,810,000	ļ
2008-09	\$	8,272,250	ļ
2009-10	\$	11,000,000	
2010-11	\$	17,206,750	ļ
2011-12		13,500,000	
2012-13	\$	22,325,000	ļ
After			İ
•			
TOTAL	\$	83,750,000	İ
Escalation Factor		3.5%	ĺ
•			

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

Prepare Model for Second Road

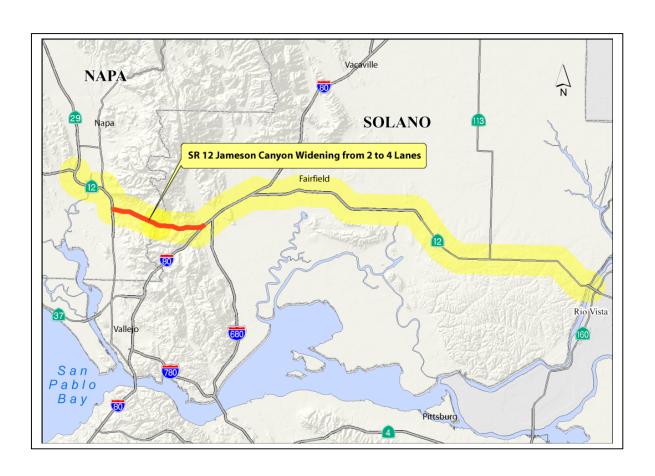
### Metropolitan Transportation Commission Corridor Mobility Improvement Account Program of Projects

### State Route 12 Corridor: Napa/Solano



### **Project Location Map**

# State Route 12 Jameson Canyon Widening: 4 Lane Alternative



#### CMIA PROJECT NARRATIVE

**SR 12 Jameson Canyon Widening – Phase 1:** Widen 2-Lane Highway to 4 Lanes

#### **Travel Corridor Description**

SR 12 has been identified by the State as an Interregional Road System route. It is an important east-west route connecting the Bay Area with the Sierra foothills via I-5. This corridor provides a critical transportation link between I-5, the State's north-south interstate facility, and the North Bay region. The SR 12 corridor, as defined here, extends approximately 32 miles from the SR 12/29 intersection in Napa County to I-5 in the Central Valley via the I-80/I-680/SR 12 interchange complex in Solano County. This corridor is one of only two State facilities connecting I-80 and US 101, SR 37 being the other, and serves regional through trips including commute, freight and recreational traffic. Other major connections along the corridor include SR 113 and SR 84.

The Jameson Canyon Road portion of the SR 12 corridor provides an important link between the growing commercial development in southern Napa County and population increases in the Fairfield/Suisun Valley area of Solano County. Within its 5.8-mile limits, Jameson Canyon Road is primarily a two-lane conventional highway; however, about one mile has already been widened to provide two lanes in each direction at the western end, between the SR 12/29 intersection and Kirkland Ranch Road in Napa County. Local and regional users of the facility include commute, commercial, recreational and agricultural traffic.

#### **Project Function**

The project would reduce congestion by increasing capacity and improving safety on the Jameson Canyon Road portion of SR 12 by upgrading it from a two-lane to a four-lane highway and constructing a median barrier. Other SR 12 safety improvements and the proposed I-80/I-680/SR 12 Interchange project constitute steps in the overall development of this facility. The Jameson Canyon widening project would further enhance these corridor improvements.

#### **Project Benefits**

#### A. Operations and Safety

Currently, the single westbound lane, along the steep grade approaching the Red Top Road/Jameson Canyon Road intersection, does not have sufficient capacity to accommodate traffic demand during morning peak periods and congestion typically extends in the rightmost lane of I-80 as far east as the I-80/680 interchange. With continued traffic growth the area of congestion would extend further east on I-80 and adversely impact operations on that critical link. An additional westbound lane, as proposed by this project would alleviate the congestion described above and improve operations on both Jameson Canyon Road and westbound I-80. This section of SR 12 experiences an AADT volume of approximately 34,000 vehicles. Truck traffic accounts for approximately 7.5% of the peak hour traffic volume over the project corridor. The current overall daily delay is not available for state routes.

During PM peak traffic periods, widening to provide an additional eastbound lane would alleviate recurrent congestion approaching the two-lane highway section west of Kirkland Ranch Road in Napa County. Currently, congestion at this location extends west through most of the mile long two-lane eastbound segment. Future traffic growth would increase the area of congestion, if no eastbound capacity were added, onto SR 29 and impact operations on that route.

Between July 2002 and June 2005, the average accident rate for Jameson Canyon Road was 1.26, slightly higher than 1.22, the statewide average for comparable facilities. The majority of the accidents were rear-end accidents resulting from congestion along the corridor. Separation of the two directions of traffic and the installation of a median barrier will significantly improve safety and reduce the number of accidents. In addition, widening Jameson Canyon Road will reduce congestion in the corridor and further decrease the number of accidents.

#### B. Air Quality

The nine-county region is part of the San Francisco Bay Area Air Quality Basin. The region currently meets the national attainment standards for Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter ( $PM_{10}$ ), fine Particulate Matter ( $PM_{2.5}$ ), and lead. The area has been designated a marginal nonattainment area for Ozone based on current federal standards. Additionally, the region does not meet the current state standards for Ozone,  $PM_{10}$  and  $PM_{2.5}$ , but is in attainment for the other pollutants listed above. The projected reductions in daily vehicle hours of delay from this project will have a beneficial effect on air quality, as air pollutant emission reductions are realized from increased travel times and speeds.

In February 2005, the MTC adopted the 25-year Regional Transportation Plan (RTP). The transportation air quality conformity analysis of the Plan resulted in a positive conformity finding. This project is included in the current RTP and in the air quality conformity analysis, and is therefore part of a conforming transportation plan.

#### C. Access to Jobs, Housing, Markets, and Commerce

There are no existing east-west freeway connections between the North Bay Counties-Marin, Sonoma, Napa and Solano, and I-80 and SR 12 is one of only two State highway facilities that provide that linkage, SR 37 being the other. Jameson Canyon Road is a critical portion of the SR 12 link, not only as a commute route between the abundant job market in southern Napa County and the housing-rich Fairfield/Vacaville areas in Solano County but also for goods movement, commute traffic and recreational traffic between counties to the west of Napa and I-80.

#### **Project Risks**

Risks to cost, schedule and scope involve the need for timely review and approval of the environmental document and mitigation requirements by resource agencies, as well as issuance of permits. Other risks include right-of-way acquisition, utilities relocation, design changes due to new information, and geotechnical investigations or risk design before environmental approval. Execution of pertinent agreements and construction

market volatility are additional risks. The capital cost estimate assumes a 3.5% per year escalation.

A conceptual study was performed for Phase 1 of Jameson Canyon. Because the eastbound and westbound lanes will be at different elevations, further studies will be done to refine structural design, drainage, construction staging, and environmental impacts. Right of way acquisition and utility relocation for the final project should be completed in this phase.

#### **Corridor System Management Plan / Preserving Mobility Gains**

Caltrans District 4 and the Metropolitan Transportation Commission have recently launched a joint effort entitled the Freeway Performance Initiative. The intent of this effort is to advance a corridor based and performance driven Transportation Planning process, employing tested System Management principles and strategies to maximize the efficiency of the existing transportation infrastructure. Corridor stakeholders will be identified and a consultant team will be selected to prepare a detailed performance assessment.

#### **APPENDIX A**

#### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

#### **Project Nomination Fact Sheet**

Nominating Agency: Solano Transportation Authority and										
	Napa County Transportation Planning Agency		Fact Sheet Date:	01/11/07						
Contact Person	John Ponte/ Janet Adams									
Phone Number	707.259.8636	Fax Number	707.259.8638							
Email Address	jponte@nctpa.net									

Project Information	n·										
County	Caltrans District	PPNO *	EA *	Region/MPO/ TIP ID*	Route / Corridor *	Post Mile Back *	Post Mile Ahead				
Napa	4	0367D	264100	00 NAP010008		Nap: 0.0 Sol: 0.0	Nap: 3.3 Sol: 2.4				
* NOTE: PPNO & EA ass	signed by Calt	rans. Region/M	I IPO/TIP ID assigr	ned by RTPA/MPO. Route/Corrid	lor & Post Mile B	•	•				
Legislative Districts	Senate:	2		Congression	al: 1						
Legislative Districts	Assembly:	7									
Implementing Agency	PA&ED:	Caltrans/NCTI	PA/STA	PS&E: Caltran/NCTPA/STA							
(by component)	R/W:	Caltrans/NCTI	PA/STA	CON: Ca	ltrans						
Project Title	SR-12 Ja	meson Can	ıyon Widenir	ng from 2 to 4 Lanes (Ph	ase 1)						
SR-12. The project upgrades the facility	in Napa ar provides a to meet s	nd Sonoma additional ca afety and op	pacity to allev	population growth in Sol viate existing and projecte uirements.	ed congestion	along the corridor					
Project Delivery Miles	tones (mont	h/year):									
Project Study Report (P	SR) complet	e	Mar-	01							
Notice of Preparation	Document 7		Oct-								
Begin Circulation of Dra			it Jul-0	7							
Final Approval of Enviro	onmental Doc	cument	Jan-	08							
Completion of plans, sp	ecifications,	and estimates	Jun-	09							
Right-of-way certificatio	n		Apr-	10							
Ready for advertisemer	nt		Jun-	10							
Construction contract av	ward		_								
Conditablion contract a	waia		Sep-	10							

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

### CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan

(dollars in thousands and escalated)

Shaded fields are automatically calculated. Please do not fill these fields.

				Date: 11-Jan	-07		
County	CT District	PPNO *	EA*	Region/MPO/TIP ID	) *		
Napa	4	0367D	264100	NAP010008			
Project Title: SR-12 Jameson Canyon Widening from 2 to 4 Lanes (Phase 1)							

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>							Project	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	6,900	0	0	0	0	0	0	6,900
PS&E	0	7,700	0	0	0	0	0	7,700
R/W SUP (CT) *	0	2,600	0	0	0	0	0	2,600
CON SUP (CT) *	0	0	0	0	10,000	0	0	10,000
R/W	0	10,100	0	0	0	0	0	10,100
CON	0	1,100	0	0	94,600	0	0	95,700
TOTAL	6,900	21,500	0	0	104,600	0	0	133,000

Corridor Manageme	Corridor Management Improvement Account (CMIA) Program									
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total		
E&P (PA&ED)								0		
PS&E								0		
R/W SUP (CT) *								0		
CON SUP (CT) *								0		
R/W		1,000						1,000		
CON					87,600			87,600		
TOTAL	0	1,000	0	0	87,600	0	0	88,600		

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:	State Tran	sportation I	mprovemer	nt Program	(STIP) - RI	P - Existing	J	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E		2,000						2,000
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	2,000	0	0	0	0	0	2,000

Funding Source:	State Transportation Improvement Program (STIP) - IIP - Existing							
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E		2,000						2,000
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	2,000	0	0	0	0	0	2,000

Funding Source:	Traffic Con	gestion Re	lief Prograr	n				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	5,500							5,500
PS&E		1,500						1,500
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	5,500	1,500	0	0	0	0	0	7,000

Shaded fields are automatically calculated. Please do not fill these fields.

### CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these field

	Shaded f	ields are autor	natically calcu	ulated. Please	do not fill the	se fields.			
							Date:	11-Jan-07	
County	CT District		PPNO * EA*			Region/MF	PO/TIP ID *		
Napa	4	036			264100		NAP010008		
Project Title:		on Canyon Wi			Phase 1)				
* NOTE: PPNO and EA as			D assigned by RT	PA/MPO					
Funding Source:	SAFETEA-								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total	
E&P (PA&ED)	1,400							1,400	
PS&E		2,200						2,200	
R/W SUP (CT) *								0	
CON SUP (CT) *								0	
R/W		2,800						2,800	
CON		·						0	
TOTAL	1,400	5,000	0	0	0	0	0	6,400	
	1,100	0,000						3, 100	
Funding Source:	State Trans	sportation Ir	nprovemer	nt Program	- RIP - New	/ (Napa an	d Solano)		
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total	
E&P (PA&ED)	1 1101	0.700	33,00	55, 10	10,11	11/12	12/10	0	
PS&E								0	
R/W SUP (CT) *	1	2,600						2,600	
CON SUP (CT) *		2,000			10.000				
		0.200			10,000			10,000	
R/W		6,300			7 000			6,300	
CON		1,100	0	0	7,000			8,100	
TOTAL	0	10,000	0	0	17,000	0	0	27,000	
Funding Source:	T								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total	
E&P (PA&ED)								0	
PS&E								0	
R/W SUP (CT) *								0	
CON SUP (CT) *								0	
R/W								0	
CON								0	
TOTAL	0	0	0	0	0	0	0	0	
		•		•					
Funding Source:									
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total	
E&P (PA&ED)				-				0	
PS&E	1							0	
R/W SUP (CT) *	<del> </del>							0	
CON SUP (CT) *								0	
R/W	+						<del> </del>	0	
CON								0	
TOTAL	0	0	0	0	0	0	0	0	
TOTAL	U	U	U	U	U	U	U	U	
A statistic most From 11	a Nasalo - (francis	la a a a a de cons		(a.d)				<del></del> 1	
Additional Funding					40/44	44/40	40/40 :	Tatal	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13+	Total	
E&P (PA&ED)									
PS&E									
R/W SUP (CT) *									
CON SUP (CT) *									
R/W									
CON	1 7								

Shaded fields are automatically calculated. Please do not fill these fields.

## BASIS OF PROJECT SCOPE, SCHEDULE, AND BENEFITS SR 12 JAMESON CANYON WIDENING PROJECT – PHASE 1

### Project Scope

- o The scope of this project was developed based on the March 2001 approved Project Study Report. The project scope included the following elements.
  - Widen SR 12 From SR 29 to Red Top Road (6 miles) from 2 to 4 lanes
  - Construct a median barrier

### Project Cost Estimate

- o The project is currently in the environmental phase. The project estimate was developed based on the following factors.
  - Construction Cost Estimate and Support Costs are in escalated dollars
  - Construction Cost Estimate includes 20% contingency
  - Construction Costs are escalated at 3.5% per year to the middle of the construction period (2011)
  - Construction Engineering and Management Costs are 10% of the Construction Cost Estimate

### Project Schedule

o This project is currently in the environmental phase. The project schedule is as follows:

PAED: January 2008
PS&E: June 2009
RTL: May 2010
Begin Construction: September 2010
End Construction: August 2013

### Project Benefits:

- o The project benefits were derived from the following documents:
  - Approved Project Study Report

### Transportation 2030 Plan for the San Francisco Bay Area – FINAL – February 2005

RTP (T2030) PROJECT DESCRIPTION	PAGE	ID#
Nap/Sol 12 – Widen route 12 (Jameson	99	94074
Canyon) from I-80 in Solano County to		
Route 29 in Napa County from 2 lanes to 4		
lanes (Napa County portion of project)		

(Copies of these reports are available upon request. See Project Narrative for a detailed description of the project benefits.)

### Project Contingency Funding

The project cost estimate was developed based on a conceptual study performed for phase one of Jameson Canyon and a 3.5% construction cost escalation rate extended to mid year of construction. Future cost increase is anticipated to be funded by future by federal, STIP, and local fund sources.

### Project Funding Plan

The proposed project funding plan reflects the combination of federal, STIP, TCRP, and CMIA funds. This proposed plan would further the objectives of the CMIA program by ultimately delivering additional improvements and congestion relief earlier than planned. See attached Funding Plan.

PROJECT:	SR 12 Jameson	n Canyon Widening	
1A)	PROJE	CT DATA	
Type of Project Select project	type from list	General Highway	
Project Location (el	nter 1 for So. Cal., 2 for No	o. Cal., or 3 for rural)	2
Length of Construc	tion Period	2.1 years	
Length of Peak Per	riod(s) (up to 8 hrs)	Existing  3.5 hours	

District:

1B HIGHWAY DESIGN AND TRAI	FFIC DAT	Α
Highway Design	Existing	New
Number of General Traffic Lanes	2	4
Number of HOV Lanes		-
HOV Restriction (2 or 3)		
Highway Free-Flow Speed	50	55
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	6.0	6.0
Affected Area	6.0	6.0
Average Daily Traffic		
Current	24,900	
- 04	w/o Project	w/ Project
Base (Year 1)	28,563	28,563
Forecast (Year 20)	61,700	61,700
Average Hourly HOV Traffic (if HOV lanes)  Percent Traffic in Weave (if oper. improvement)	0	0
Percent Trucks (include RVs, if applicable)	8%	8%
Truck Speed (if passing lane project)	0 70	0 70
Truck opecu (ii passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		
	,	
-		
-		
<u> </u>		

#### (1C) **HIGHWAY ACCIDENT DATA** Actual 3-Year Accident Data for Facility 0.01 Fatal Accidents Injury Accidents 40 0.24 Property Damage Only (PDO) Accidents 0.47 77 Statewide Average for Highway Classification Accident Rate (per million vehicle-miles) 1.26 1.22 Percent Fatal Accidents 0.85% 0.85% Percent Injury Accidents 33.9% 33.9%

Project #

EA: PPNO: 42 264100

0367D

-		
-		
	I.	

### TOTAL CMIA PROJECT COSTS (in escalated dollars)

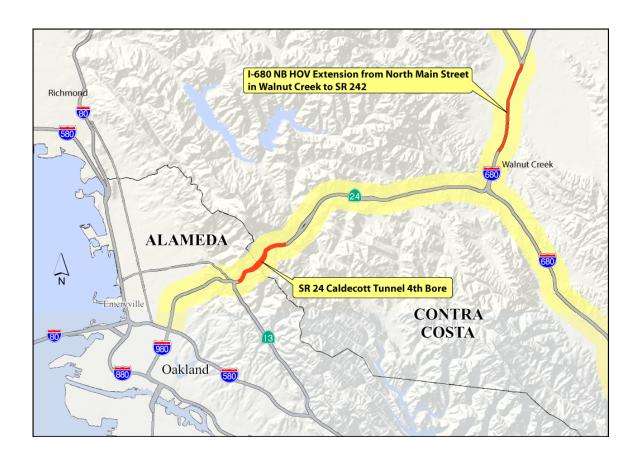
From Project Nomination Fact Sheet:						
Fiscal Yea						
Before	\$ -					
2007-08	\$ 26,900,000					
2008-09	\$ -					
2009-10	\$ -					
2010-11	\$ 53,100,000					
2011-12	\$ 53,100,000					
2012-13	\$ -					
After						
TOTAL	\$ 133,100,000					
Escalation Factor	3.5%					

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

Prepare Model for Second Road

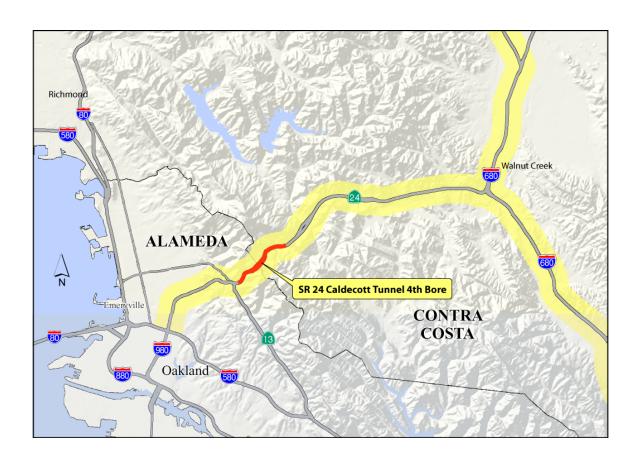
## Metropolitan Transportation Commission Corridor Mobility Improvement Account Program of Projects

## State Route 24/I-680 Corridor: Contra Costa/Alameda



## **Project Location Map**

# **State Route 24 Caldecott Tunnel 4<sup>th</sup> Bore**



### CMIA PROJECT NARRATIVE

### **CC 24 Caldecott Tunnel Improvement Project**

### **Travel Corridor Description**

State Route (SR) 24 is included in the California's Freeway and Expressway System. It is a 15-mile freeway corridor, extending from I-580 in Oakland, Alameda County, to I-680 in Walnut Creek, Contra Costa County. This route is a major regional commute corridor and is critical to providing freeway connectivity from San Francisco and Oakland to I-80 and I-580, the region's two freeway connectors to I-5. Current traffic volumes are approximately 160,000 vehicles per day. Regional rail (BART) extends along the entire SR 24 corridor median.

Route 24 has long had a major discontinuity at the Caldecott Tunnel, located approximately at the midpoint of the corridor. Since the opening of the third bore of the Caldecott Tunnel in 1964 in conjunction with widening of the freeway, the six-lane tunnel has not matched the eight-lane configuration of the adjacent freeway sections. As a result of this discontinuity, significant congestion occurs at the tunnel approaches, primarily in the off-peak direction when only two lanes are provided; although there is congestion in the peak direction as well.

### **Project Function**

The proposed project would add a fourth bore with two lanes to the existing Caldecott Tunnel to improve mobility and enhance safety. The Caldecott Tunnel is the primary bottleneck on SR 24. Currently, the direction of the middle bore is switched several times a day to accommodate traffic demands. Construction of a two-lane bore, north of the existing tunnels, will provide continuous four lanes of traffic for each direction.

### **Project Benefits**

### A. Operations and Safety

Currently, there are three Caldecott Tunnel bores: the northern bore is used for the westbound direction and the southern bore is used for the eastbound direction at all times. The middle bore is switched twice a day during the week, and several times during the weekend to accommodate the traffic demand during the peak periods. Traffic congestion develops in the peak (AM westbound and PM eastbound) and non-peak (AM eastbound and PM westbound) direction. It is expected that traffic congestion will grow faster in the non-peak direction than in the peak direction.

The proposed project will alleviate existing and projected congestion in the non-peak direction, eliminate the need to reverse the direction of the center bore, improve safety of the traveling public and for maintenance workers, provide additional capacity during emergencies, and improve operations. Adding a fourth bore will accommodate existing and future traffic demand in the non-peak direction. The existing non-peak direction congestion of approximately 2,200 vehicle-hours per day will be eliminated. Without the

fourth bore, the non-peak direction congestion is expected to increase to nearly 15,000 vehicle-hours per day in the year 2032.

### B. Air Quality

The Caldecott Tunnel Improvement project has met transportation air quality conformity requirements. It has been included in the regional air quality analysis conducted by the Metropolitan Transportation Commission (MTC) and the Bay Area Air Quality Management District for the Regional Transportation Program (RTP) and Transportation Improvement Program (TIP), both of which conform to the State Implementation Program (SIP). Since the design concept and project scope have not changed since the air quality conformity analysis took place, the 2-lane project alternative conforms to the SIP while a 3-lane project alternative does not. The recommended preferred alternative is a 2-lane bore; thus the proposed project is in conformance with the air quality requirements.

### C. Access to Jobs, Housing, Markets, and Commerce

SR 24 largely serves commuters traveling from Contra Costa County communities such as Antioch, Pittsburg-Bay Point, Concord, Walnut Creek, Lafayette and Orinda to employment sites in the East Bay and San Francisco. Over the next 25 years the creation of new jobs is forecasted to increase in Alameda and Contra Costa Counties by 46 percent, while population and number of households will increase by approximately 30 percent. The new Caldecott Tunnel fourth bore could generate up to \$650 million in revenue by creating up to 4,000 new direct, indirect, and induced jobs as a result of improved access to regional job centers.

Those jurisdictions to the immediate east and west of the Caldecott Tunnel and along the I-680 Corridor are currently near or at their General Plan build-out condition. Because of this it is not foreseen that the Caldecott project will substantially impact access to existing land use or induce major growth.

### **Project Risks**

This project is currently in the final phase of environmental clearance and the project design plans are approximately 50% completed. The project scope, schedule and cost have been fully defined.

Three primary project risks exist: (1) potential legal challenge to the environmental document due to public opposition from some Alameda county residents, (2) limited number of qualified bidders, (3) cost increases due to schedule delays. For example, there could be delays in obtaining required right of way should condemnation be required. This project requires permanent and temporary easements. The current project schedule assumes that these easements will be acquired without the use of condemnation. Any condemnation activities and any impacts due to the enactment of SB 1210 could delay the project schedule, therefore increasing the construction cost. A detailed quantitative risk analysis has been completed. The risk analysis identified a risk contingency of \$42 million based on a 50 percentile (50% chance of under-running and 50% chance of over-running) and of \$76 million based on an 80 percentile (80% chance of under-running and

20% chance of over-running) risk. The 80 percentile risk contingency has been adopted into the total project budget.

### Corridor System Management Plan / Preserving Mobility Gains

Caltrans District 4 and the Metropolitan Transportation Commission have recently launched a joint effort entitled "The Freeway Performance Initiative" to advance a corridor-based and performance-driven Transportation Planning process, employing tested System Management principles and strategies to maximize the efficiency of the existing transportation infrastructure.

Most of the corridor has already been equipped with TOS equipment, including traffic monitoring and motorist information devices. The proposed project would extend these capabilities into the new Fourth Bore and would also reconstruct the tunnel's Operations and Maintenance Center. The ability to rapidly detect and clear incidents within the tunnels will be a key strategy in preserving corridor mobility.

### **APPENDIX A**

### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

### **Project Nomination Fact Sheet**

Nominating Agenc	y: Contra Costa Transportation Authority		Fact Sheet Date:	01/11/07
Contact Person	Paul Maxwell			
Phone Number	(925) 256-4735	Fax Number	(925) 407-0128	
Email Address	pmaxwell@ccta.net		·	

County	Caltrans	PPNO *	EA*	Region/MPO/ TIP ID*	Route /	Post Mile Back *	Post Mile Ahead
Alameda Contra Costa	4	0057A	294900	CC-010002	24	Ala PM 5.3	CC PM 1.3
* NOTE: PPNO & EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO. Route/Corridor & Post Mile Back/Ahead used for S							tate Highway System
La sialativa Distriata	Senate:	9		Congressional	l: 9		<u> </u>
Legislative Districts	Assembly:	14, 16					
Implementing Agency	PA&ED:	Caltrans/CC	ГА	PS&E: Cal	trans/CCTA		
(by component)	R/W:	Caltrans/CC	ГА	CON: Cal	trans/CCTA		
Project Title	State Ro	ute 24 Cald	ecott Tunnel	Fourth Bore			
Description of Major P	Project Bene	fite					
The proposed proje improve safety of th operations. Adding	ect will allev ne traveling g a fourth b	viate existing public and reco	maintenance ommodate ex	d congestion in the non-p workers, provide additional isting and future traffic der	al capacity du mand during t	ring emergency ar the non-peak direc	nd improve
The proposed proje improve safety of th operations. Adding	ect will allev ne traveling g a fourth b	viate existing public and i ore will acco	maintenance ommodate ex	workers, provide additiona	al capacity du mand during t	ring emergency ar the non-peak direc	nd improve
The proposed proje improve safety of th operations. Adding Expected Source(s) of Project Delivery Miles	ect will alleve traveling g a fourth b f Additional	viate existing public and in ore will according Necestral through the view of	maintenance ommodate ex essary to Comp	workers, provide additional isting and future traffic der blete Project - as Identified Ur	al capacity du mand during t	ring emergency ar the non-peak direc	nd improve
The proposed proje improve safety of th operations. Adding Expected Source(s) of Project Delivery Milest Project Study Report (P	ect will alleve traveling g a fourth b	viate existing public and income will accome  Funding Neces  ch/year):	maintenance commodate ex essary to Comp	workers, provide additional isting and future traffic der clete Project - as Identified Ur	al capacity du mand during t	ring emergency ar the non-peak direc	nd improve
The proposed proje improve safety of the operations. Adding Expected Source(s) of Project Delivery Miles: Project Study Report (P. Notice of Preparation	ect will alleve traveling a fourth be f Additional tones (month be PSR) complet Document	viate existing public and in ore will acco	maintenance commodate ex essary to Comp	workers, provide additional isting and future traffic der blete Project - as Identified Ur	al capacity du mand during t	ring emergency ar the non-peak direc	nd improve
The proposed proje improve safety of the operations. Adding Expected Source(s) of Project Delivery Miles:  Project Study Report (P. Notice of Preparation Begin Circulation of Dra	ect will alleve traveling a fourth be f Additional tones (month by SR) completed Document aft Environment	viate existing public and in ore will accommoderate will accommoderate with the commoderate w	Dec EA Nov	workers, provide additional isting and future traffic der older Project - as Identified Ur	al capacity du mand during t	ring emergency ar the non-peak direc	nd improve
The proposed proje improve safety of the operations. Adding Expected Source(s) of Project Delivery Miles: Project Study Report (P Notice of Preparation Begin Circulation of Dra Final Approval of Environment Study Report of Preparation Dra Final Approval of Environment Study Report of Environment Study Report (P Notice of Preparation Begin Circulation of Dra Final Approval of Environment Study Report (P Notice of Preparation Begin Circulation of Dra Final Approval of Environment Study Report (P Notice of Preparation Begin Circulation of Dra Final Approval of Environment Study Report (P Notice of Preparation Begin Circulation of Dra Final Approval of Environment Study Report (P Notice of Preparation Begin Circulation of Dra Final Approval of Environment Study Report (P Notice of Preparation Begin Circulation of Dra Final Approval of Environment Study Report (P Notice of Preparation Begin Circulation of Dra Final Approval of Environment Study Report (P Notice of Preparation Begin Circulation of Dra Final Approval of Environment Study Report (P Notice of Preparation Begin Circulation of Dra Final Approval of Environment Study Report (P Notice of Preparation Begin Circulation of Dra Final Approval of Environment Study Report (P Notice of Preparation Begin Circulation Study Report P Notice of Preparation Begin Circulation Study Report P Notice Of Preparation Study Report P Notice Of P Notice O	tones (monte of Environmental Documental Doc	riate existing public and incore will accommend with the public and incore will accommend with the public and incore with the public accommend with	Dec EA Nov tt May	workers, provide additional isting and future traffic der blete Project - as Identified Ur  -00 -02 - 06 -07	al capacity du mand during t	ring emergency ar the non-peak direc	nd improve
The proposed proje improve safety of th operations. Adding Expected Source(s) of Project Delivery Miles: Project Study Report (P Notice of Preparation Begin Circulation of Dra Final Approval of Environ Completion of plans, sp	tones (monte of Environmental Documental Documents, per conficient of Environmental Documental Docu	riate existing public and incore will accommend with the public and incore will accommend with the public and incore with the public accommend with	Dec EA Nov t May Aug Aug	workers, provide additional isting and future traffic der blete Project - as Identified Ur  -00 -02 - 06 -07	al capacity du mand during t	ring emergency ar the non-peak direc	nd improve
The proposed proje improve safety of th operations. Adding Expected Source(s) of Project Delivery Milest Project Study Report (P Notice of Preparation Begin Circulation of Dra Final Approval of Envirc Completion of plans, sp Right-of-way certification	tones (monte)  Additional  Tones (monte)  FACT Environmental Documental Docum	riate existing public and incore will accommend with the public and incore will accommend with the public and incore with the public accommend with	Dec EA Nov t May Aug Nov	workers, provide additional isting and future traffic der blete Project - as Identified Ur  -00 -02 - 06 -07 -08	al capacity du mand during t	ring emergency ar the non-peak direc	nd improve
The proposed proje improve safety of th operations. Adding Expected Source(s) of Project Delivery Miles: Project Study Report (P Notice of Preparation Begin Circulation of Dra Final Approval of Environment Completion of plans, sp	tones (monte procedure)  f Additional  tones (monte procedure)  f Environmental Documental Document	riate existing public and incore will accommend with the public and incore will accommend with the public and incore with the public accommend with	Dec EA Nov t May Aug Aug	workers, provide additional isting and future traffic derivating and future traffic derivations and future traffic derivatio	al capacity du mand during t	ring emergency ar the non-peak direc	nd improve

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan**

(dollars in thousands and escalated)
Shaded fields are automatically calculated. Please do not fill these fields.

				<b>Date:</b> 11	1-Jan-07
County	CT District	PPNO *	EA*	Region/MPO/T	TP ID *
Alameda Contra Cost	4	0057A	294900	CC-01000	02
Project Title:	Caldecott Tur	nnel Improvement Project			

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

Proposed Total Project Cost								Project
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	20,000	500						20,500
PS&E	10,500	12,200	500					23,200
R/W SUP (CT) *	0	200						200
CON SUP (CT) *	0	0	23,000					23,000
R/W	0	200						200
CON	0	0	352,900					352,900
TOTAL	30,500	13,100	376,400	0	0	0	0	420,000

Corridor Management Improvement Account (CMIA) Program								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13 +	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *			17,600					17,600
R/W								0
CON			157,400					157,400
TOTAL	0	0	175,000	0	0	0	0	175,000

Funding Source:	Local Sale	s Tax Meas	sure J					
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON			125,000					125,000
TOTAL	0	0	125,000	0	0	0	0	125,000

Funding Source:	Regional M	leasure 2						
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13 +	Total
E&P (PA&ED)	2,000	500						2,500
PS&E	4,500	2,000	500					7,000
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON			40,500					40,500
TOTAL	6,500	2,500	41,000	0	0	0	0	50,000

Funding Source:	SAFETEA-	-LU						
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON			1,000					1,000
TOTAL	0	0	1,000	0	0	0	0	1,000

Shaded fields are automatically calculated. Please do not fill these fields.

### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan**

(dollars in thousands and escalated)

Shaded fields are automatically calculated. Please do not fill these fields.

				<b>Date:</b> 11-Jan-07
County	CT District	PPNO *	EA*	Region/MPO/TIP ID *
Alameda Contra Cost	4	0057A	294900	CC-010002
Project Title:	Caldecott Tui	nnel Improvement Project		

\* NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

Funding Source:	Transporta	tion Conge:	stion Relief	f Program (	TCRP)			
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	10,000							10,000
PS&E	6,000	4,000						10,000
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	16,000	4,000	0	0	0	0	0	20,000

Funding Source:	State Trans	sportation li	mprovemer	nt Program	(STIP) - IIF	P - Existing		
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13 +	Total
E&P (PA&ED)	8,000							8,000
PS&E		4,200						4,200
R/W SUP (CT) *		200						200
CON SUP (CT) *			5,400					5,400
R/W		200						200
CON								0
TOTAL	8,000	4,600	5,400	0	0	0	0	18,000

Funding Source:	State Tran	sportation li	mprovemer	nt Program	(STIP) - RI	P - Existing	]	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E (1)		2,000						2,000
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	2,000	0	0	0	0	0	2,000

Funding Source:	State Tran	sportation I	mproveme	nt Program	- RIP - Nev	v (Contra C	costa)	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13 +	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON			29,000					29,000
TOTAL	0	0	29,000	0	0	0	0	29,000

<b>Additional Funding</b>	Needs (fund	ling needs no	t yet commit	ted)				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13+	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

<sup>(1) \$2</sup> million of STIP-RIP for the PS&E phase: locals to request State funds only.

Shaded fields are automatically calculated. Please do not fill these fields.

## BASIS OF PROJECT SCOPE, COST, SCHEDULE AND BENEFITS CALDECOTT TUNNEL IMPROVEMENT PROJECT

### Project Scope

The approved May 2006 Draft Project Report (Draft PR) and subsequent studies define the scope of the project.

### Project Cost Estimate

- This project is currently in the final environmental clearance phase and is being designed at risk. The project plans are approximately 50% complete. The project cost estimate was developed based on the following factors:
  - The Draft PR cost estimate, prepared in August 2005, has been updated in August 2006:
  - Escalated cost estimate (3.5% per year to mid-point of construction activity) for the preferred 2-lane alternative based on 30% design and on the updated risk analysis prepared in August 2006: \$385 million to \$420 million (50<sup>th</sup> and 80<sup>th</sup> percentile cost range);
  - For the purpose of programming, the 80<sup>th</sup> percentile **total project cost estimate of \$420 million** will be used:
  - The tunnel cost estimate was prepared using a bottoms-up approach, based on cost of material, equipment, labor, profit and insurance. The tunnel cost estimate was verified by an independent tunnel design consultant and was found to be within 0.2%;
  - The roadway and other structures cost estimates were developed based on Caltrans standard cost estimating methods;
  - Right of Way (ROW) capital cost estimate includes acquisition, damages and goodwill, state share of utility relocation, title and escrow fees, as per ROW data sheet;
  - The PA&ED, PS&E and ROW support costs were developed based on bottoms-up WBS level 7 task budgets Caltrans, local agency and consultant's staff; and
  - The construction support cost estimate was developed using a bottoms-up approach based on expected number of inspectors/ QA personnel/RE/Senior on the job during a 4.5-year construction period.

### Project Schedule

- The PAED and PS&E project schedules were developed using Microsoft Office Project, based on level 7 WBS.
- o The PA&ED schedule assumes:
  - The type of environmental document being an Environmental Impact Report/Environmental Assessment (EIR/EA) under CEQA and NEPA;
  - No legal challenges to the environmental document; and
  - Final environmental clearance and a Record of Decision to be obtained in August 2007.
- o The PS&E schedule assumes:
  - PS&E being developed concurrently with PA&ED;
  - Completion of PA&ED by August 2007 so that the right-of-way acquisition process can start; and
  - Permanent and temporary easements will be acquired without the use of condemnation.

### Project Benefits

- The project benefits are derived from various technical studies prepared for the following documents:
  - Approved Draft Project Report
  - Approved Draft Environmental Document
- Transportation 2030 Plan for the San Francisco Bay Area FINAL February 2005 Appendix 1:

RTP (T2030) Project Description	Page	ID#
CC/ALA 24 – Caldecott Tunnel fourth bore	94	21206

### Project contingency funding

- o In addition to escalation, three types of "contingencies" were added to the cost estimate:
  - Risk Contingency: \$42 million (50<sup>th</sup> percentile) and \$76 million (80<sup>th</sup> percentile);
  - Design Allowance: \$4 million; and
  - Construction Contract Contingency: \$29 million.
- A quantitative risk management plan using a probabilistic, risk-based, integrated project cost and schedule model was developed for this project using the Monte Carlo simulation. Such simulation included over 100 risks identified by the project team, along with probability of occurrence, associated costs and schedule impact. Risk contingencies based on 50<sup>th</sup> and 80<sup>th</sup> percentile were determined. For programming purpose, the 80<sup>th</sup> percentile will be used.
- Should an increase in the cost estimate occur that was not identified in the risk analysis, nor
  is covered under the design allowance and construction contract contingency, then such
  increased cost will be covered by additional STIP shares and/or local funds.

District:	4	Project #	36
		EA:	294901
PROJECT:	SR 24 Caldecott Tunnel 4th Bore	PPNO:	0057A

1A PROJEC	T DATA	
Type of Project		
Select project type from list	General Highway	
Project Location (enter 1 for So. Cal., 2 for No.	Cal., or 3 for rural)	
Length of Construction Period	4.5 years	
Length of Peak Period(s) (up to 8 hrs)	Existing hours	

1B HIGHWAY DESIGN AND TRAI	FIC DAT	A
Highway Design	Existing	New
Number of General Traffic Lanes	6	8
Number of HOV Lanes		
HOV Restriction (2 or 3)		
Highway Free-Flow Speed	65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	3.0	3.0
Affected Area	3.0	3.0
		•
Average Daily Traffic		i
Current	166,000	
	w/o Project	w/ Project
Base (Year 1)	177,509	188,186
Forecast (Year 20)	226,100	239,700
Average Hourly HOV Traffic (if HOV lanes)		0
Percent Traffic in Weave (if oper. improvement)	0.50/	0.50/
Percent Trucks (include RVs, if applicable)	2.5%	2.5%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
	0	
Hourly Ramp Volume (if aux. lane/on-ramp proj.) Metering Strategy (1, 2, 3, or D, if on-ramp proj.)	0	0
	l	
	I	1

1C HIGHWAY ACCIDE	NT DATA	
Actual 3-Year Accident Data for Facility		
•	Count (No.)	Rate
Fatal Accidents	1	0.00
Injury Accidents	168	0.31
Property Damage Only (PDO) Accidents	471	0.86
Statewide Average for Highway Classificat	ion	
	Existing	New
Accident Rate (per million vehicle-miles)	1.45	1.07
Percent Fatal Accidents	0.6%	0.5%
Percent Injury Accidents	30.4%	31.0%

-	
	<b>=</b>
	_

### TOTAL CMIA PROJECT COSTS (in escalated dollars)

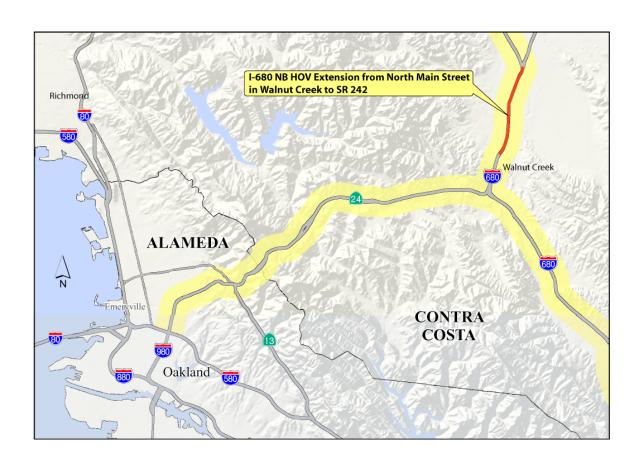
rom Project Nomination Fa	ct S	Sheet:	
Fiscal Yea	r:		
Before	\$	30,500,000	
2007-08	\$	12,100,000	
2008-09	\$	26,900,000	
2009-10	\$	82,600,000	
2010-11	\$	80,600,000	
2011-12	\$	86,500,000	
2012-13	\$	50,400,000	
After	\$	50,400,000	
TOTAL	\$ 4	420,000,000	
Escalation Factor		3.5%	

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

Prepare Model for Second Road

## **Project Location Map**

## I-680 Northbound HOV Extension (North Main Street in Walnut Creek to State Route 242)



### CMIA PROJECT NARRATIVE

### I-680 Northbound HOV Lane: North Main Street to SR 242

### **Travel Corridor Description**

The northern I-680 corridor from I-80 to I-580 is a major north-south freeway in the East Bay of the San Francisco Bay Area. The 40 mile-long corridor spans central Solano County, central Contra Costa County, and eastern Alameda County. The Benicia-Martinez Bridge provides the connection across the Carquinez Strait between Solano and Contra Costa Counties. The corridor provides direct access to industrial centers in Benicia and Martinez, and urban centers in Concord, Walnut Creek, and the Tri-Valley Area (Dublin-Pleasanton-Livermore), and is growing as an intra-regional trade corridor in the East Bay.

The busiest portion of the corridor lies within Central Contra Costa County, where the freeway has five lanes in each direction excluding auxiliary lanes, and the traffic volumes reach over 300,000 vehicles per day. Trucks account for approximately 4% of total traffic. Traffic is very directional with heavy southbound traffic in the morning and heavy northbound traffic in the afternoon. In 2004, delay was measured to be 3,270 vehicle-hours during commute hours.

In the southbound direction, there is nine mile-long HOV lane from just south of the Benicia-Martinez Bridge to North Main Street in Walnut Creek. In the northbound direction, there is a six mile-long HOV lane from SR 242 to just south of the Benicia-Martinez Bridge. Further to the south, through Danville and San Ramon, another HOV lane operates in both directions between Rudgear Road and Alcosta Boulevard/

### **Project Function**

The proposed project would provide an approximately 3.8 mile-long HOV lane in the northbound direction from North Main Street to SR 242 in Walnut Creek, mirroring the existing HOV lane provisions for the southbound direction with the Central Contra Costa County portion of the corridor. This would extend the northbound HOV lane and also reduce the northbound length of the existing gap in the I-680 HOV lane network between the Rudgear Road and SR 242.

### **Project Benefits**

### A. Operations

The proposed HOV lane would partially fill a critical gap in the Bay Area's carpool lane network, and is expected to reduce congestion, improve safety, and improve air quality along this important corridor. In 2005, the HOV time savings along the existing portion of the northbound HOV lanes was measured at 18 minutes in the afternoon commute hours. The proposed HOV extension will increase those time savings, encouraging ridesharing and reducing the number of single-occupant autos.

### B. Air Quality

The nine-county region is part of the San Francisco Bay Area Air Quality Basin. The region currently meets the national attainment standards for Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter ( $PM_{10}$ ), fine Particulate Matter ( $PM_{2.5}$ ), and lead. The area has been designated a marginal non-attainment area for Ozone based on current federal standards. Additionally, the region does not meet the current state standards for Ozone,  $PM_{10}$  and  $PM_{2.5}$ , but is in attainment for the other pollutants listed above. By reducing starts, stops, and idling, the project is expected to result in significant reductions in both Ozone precursors and toxic particulate matter that is heavily produced by diesel trucks, which is consistent with the region's air quality attainment goals.

In February, 2005, the Metropolitan Transportation Commission (MTC) adopted the 25-year Regional Transportation Plan (RTP). The transportation air quality conformity analysis of the Plan resulted in a positive conformity finding. This project is included in the current RTP and in the air quality conformity analysis, and is therefore part of a conforming transportation plan.

### C. Access to Jobs, Housing, Markets, and Commerce

The I-680 corridor is an important conduit between more affordable housing in Eastern Contra Costa County and Solano County and major employment centers in the Tri-Valley in Alameda County, Silicon Valley in the South Bay, and the Peninsula.

### **Project Risks**

The Project Study Report (PSR) is expected to be complete in January 2007. The scope, schedule, and cost risks are expected to be low.

### Corridor System Management Plan / Preserving Mobility Gains

Caltrans District 4 and the Metropolitan Transportation Commission have recently launched a joint effort entitled "The Freeway Performance Initiative" to advance a corridor-based and performance-driven transportation planning process, employing tested system management principles and strategies to maximize the efficiency of the existing transportation infrastructure. The northern I-680 corridor is one of twelve key corridors identified for analysis and development of a Corridor System Management Plan over the next 18 months.

Most of the corridor is already equipped with Traffic Operations System (TOS) elements, including ramp metering, traffic monitoring, traffic surveillance cameras, and motorist information devices. The corridor planning effort will include ongoing and planned projects in the area, which are expected to preserve mobility gains and other benefits from the project.

### APPENDIX A

### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

### **Project Nomination Fact Sheet**

Nominating Agenc	y: Contra Costa Transportation Authority (CC	CTA)	Fact Sheet Date:	01/11/07
Contact Person	Hisham Noeimi			
Phone Number	(925) 256-4731	Fax Number	(925) 407-0128	
Email Address	hnoeimi@ccta.net			

Legislative Districts	Caltrans				Route /		
* NOTE: PPNO & EA assig	District	PPNO *	EA *	Region/MPO/ TIP ID*	Corridor *	Post Mile Back *	Post Mile Ahead
_egislative Districts	4		0A610K	CC-070022	680	15.7	R18.88
_egisiative Districts	gned by Calt	rans. Region/M	IPO/TIP ID assign	ed by RTPA/MPO. Route/Corrido	r & Post Mile Bad	ck/Ahead used for State	e Highway System.
	Senate:	7		Congressional	7 & 10		
<i>F</i>	Assembly:	11 & 15					
	PA&ED:	CCTA		PS&E: Calt	rans/CCTA		
by component) F	R/W:	Caltrans/CCT	A	CON: Calt	rans/CCTA		
Project Title	Interstate	e 680 North	bound HOV L	ane Extension (N. Main	St. to SR-24	2)	
peak hours by using to congestion, alleviate	ote and fa the HOV traffic del	acilitate carp lane from N ays, improv	. Main to the E e safety, and i	ne completion of this proje Benicia-Martinez Bridge or mprove air quality. lete Project - as Identified Un	n I-680 NB. TI	he project will redi	
Project Delivery Milesto			T.	0007			
Project Study Report (PS	R) complet	е	Janua	ary 2007			
Project Study Report (PS Notice of Preparation	R) complet	е Гуре:					
Project Study Report (PS Notice of Preparation   E	R) complet Document 1 Environme	e Type: ental Documer	nt June	2008			
Project Study Report (PS Notice of Preparation   I Regin Circulation of Draft Final Approval of Environ	R) complet Document 1 Environme	e Type: ental Document cument	June June	2008 2009			
Project Study Report (PS Notice of Preparation   I Begin Circulation of Draft Final Approval of Environ Completion of plans, spec	R) complet Document 1 Environme	e Type: ental Document cument	June June Dece	2008 2009 mber 2010			
Project Study Report (PS Notice of Preparation   E Regin Circulation of Draft Final Approval of Environ Completion of plans, specification	R) complet Document 1 Environme	e Type: ental Document cument	June June Dece	2008 2009 mber 2010 2011			
Project Study Report (PS	R) completed Document Tenvironmental Documental Document	e Type: ental Document cument	June Dece April	2008 2009 mber 2010 2011			

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan

(dollars in thousands and escalated)
Shaded fields are automatically calculated. Please do not fill these fields.

				<b>Date:</b> 11-Jan-07
County	CT District	PPNO *	EA*	Region/MPO/TIP ID *
Contra Costa	4	0	0A610K	CC-070022
Project Title:	Interstate 680	Northbound HOV Lane Ex	tension (N. Main St. to SR-242)	

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	ject Cost							Project
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	0	2,100	0	0	0	0	0	2,100
PS&E	0	0	2,100	0	0	0	0	2,100
R/W SUP (CT) *	0	0	0	0	0	0	0	0
CON SUP (CT) *	0	0	0	0	0	0	0	0
R/W	0	0	0	0	0	0	0	0
CON	0	0	0	0	16,800	0	0	16,800
TOTAL	0	2,100	2,100	0	16,800	0	0	21,000

Corridor Manageme	ent Improvem	ent Account	(CMIA) Prog	ram *				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)		2,100						2,100
PS&E			2,100					2,100
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON					6,300			6,300
TOTAL	0	2,100	2,100	0	6,300	0	0	10,500

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:	State Trans	sportation I	mprovemei	nt Program	- RIP - Nev	v (Contra C	osta)	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON					10,500			10,500
TOTAL	0	0	0	0	10,500	0	0	10,500

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Shaded fields are automatically calculated. Please do not fill these fields.

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

							Date:	11-Jan-07
County	CT Dietriet	PPN	O *		EA*			MPO/TIP ID *
County Contra Costa	CT District	0			0A610K			070022
Project Title:		Northbound F		ension (N. Ma		(42)	1 00	010022
* NOTE: PPNO and EA as					iiii ot. to ore 2	·¬ <b>∠</b> )		
Funding Source:	ongricu by Carrains.	rtogion/ivii O/ i i	D doolgrica by TCT	7,01011 0				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	1 1101	01700	00/03	03/10	10/11	11/12	12/13	0
PS&E								0
								0
R/W SUP (CT) *								0
CON SUP (CT) *							-	
R/W							1	0
CON	_				_			0
TOTAL	0	0	0	0	0	(		0
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E							1	0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	(	)	0 0
TOTAL	U	V	o <sub>l</sub>	V	V		<b>/</b>	
Funding Source:								
Component	Drior	07/00	00/00	00/10	10/11	11/10	10/10	Total
	Prior	07/08	08/09	09/10	10/11	11/12	12/13	
E&P (PA&ED) PS&E								0
IPSXE								0
								_
R/W SUP (CT) *								0
R/W SUP (CT) * CON SUP (CT) *								0
R/W SUP (CT) * CON SUP (CT) * R/W								0 0
R/W SUP (CT) * CON SUP (CT) * R/W CON								0 0 0
R/W SUP (CT) * CON SUP (CT) * R/W	0	0	0	0	0	(		0 0
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL	0	0	0	0	0	(		0 0 0
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Funding Source:				-				0 0 0 0
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Funding Source: Component	0 Prior	07/08	08/09	0	10/11	11/12	12/13	0 0 0
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Funding Source: Component E&P (PA&ED)								0 0 0 0 0 0
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Funding Source: Component E&P (PA&ED) PS&E								0 0 0 0 0 0 Total
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Funding Source: Component E&P (PA&ED)								0 0 0 0 0 0 Total
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Funding Source: Component E&P (PA&ED) PS&E								0 0 0 0 0 0 0 Total
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Funding Source:     Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) *								0 0 0 0 0 0 Total
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Funding Source: Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W								0 0 0 0 0 0 0 Total
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Funding Source: Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON		07/08		09/10	10/11	11/12	12/13	0 0 0 0 0 0 0 Total
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Funding Source: Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W	Prior		08/09				12/13	0 0 0 0 0 0 0 Total
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Funding Source:     Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL	Prior	07/08	08/09	09/10	10/11	11/12	12/13	0 0 0 0 0 0 0 Total
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Funding Source:     Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Additional Funding	Prior  O  Needs (fund	07/08 07/08	08/09 0	09/10 0	10/11	11/12	12/13	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Funding Source:     Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Additional Funding Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Funding Source:     Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Additional Funding     Component E&P (PA&ED)	Prior  O  Needs (fund	07/08 07/08	08/09 0	09/10 0	10/11	11/12	12/13	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Funding Source:     Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Additional Funding     Component E&P (PA&ED) PS&E	Prior  O  Needs (fund	07/08 07/08	08/09 0	09/10 0	10/11	11/12	12/13	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Funding Source:     Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Additional Funding     Component E&P (PA&ED) PS&E R/W SUP (CT) *	Prior  O  Needs (fund	07/08 07/08	08/09 0	09/10 0	10/11	11/12	12/13	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Funding Source:     Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Additional Funding     Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) *	Prior  O  Needs (fund	07/08 07/08	08/09 0	09/10 0	10/11	11/12	12/13	Total  Total  O  O  O  O  O  O  O  O  O  O  O  O  O
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Funding Source:     Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Additional Funding     Component E&P (PA&ED) PS&E R/W SUP (CT) * R/W CON TOTAL	Prior  O  Needs (fund	07/08 07/08	08/09 0	09/10 0	10/11	11/12	12/13	Total  Total  O  O  O  O  O  O  O  O  O  O  O  O  O
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Funding Source:     Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Additional Funding     Component E&P (PA&ED) PS&E R/W SUP (CT) * R/W CON TOTAL	Prior  O  Needs (fund	07/08 07/08	08/09 0	09/10 0	10/11	11/12	12/13	Total  Total  O  O  O  O  O  O  O  O  O  O  O  O  O
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Funding Source:     Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Additional Funding     Component E&P (PA&ED) PS&E R/W SUP (CT) * R/W CON TOTAL	Prior  O  Needs (fund Prior	07/08 0 ing needs not 07/08	08/09 0 t yet committ 08/09	09/10 0 ed) 09/10	10/11	11/12	12/13	Total 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Shaded fields are automatically calculated. Please do not fill these fields.

# BASIS OF PROJECT SCOPE, COST, SCHEDULE, AND BENEFITS I-680 NB HOV Lane Extension (N. Main to SR242)

### Project Scope

- o The scope of this project was developed based on the draft Project Study Report completed by Caltrans on Jan. 11. 2007. The PSR studied 2 build alternatives:
  - 1. Alternative 1: Accommodate 11' HOV lane by narrowing the left shoulder to 2' and narrowing the inside four travel lanes from 12' to 11' from N. Main St. to Monument Blvd, and widen to provide standard lane widths and shoulders from Monument Blvd to 0.1 miles before I-680/SR242 Separation. Approaching the I-680/SR242 Separation the left shoulder narrows to between 1'-2' and three inside travel lanes narrow to 11' at the bridge.
  - 2. Alternative 2: Provide 12' HOV lane by widening to full minimum standards along the entire stretch from N. Main to I-680/SR242 Separation. This requires relocation of the truck weigh station at Treat, and widening of overcrossing at Monument and the Contra Costa Canal Undercrossing and replacement of I-680/SR242 bridge structure.

### Project Cost Estimate

- o The project estimate was developed based on the following factors:
  - Capital Cost Estimate and Support Costs were developed in 2006 dollars and are based on current experienced unit prices.
  - Capital Cost Estimate includes a 25% contingency
  - Cost is escalated @ 3% to 2011.

Alternative 1 is expected to cost between \$20M to \$26M while Alternative 2 cost estimate exceeds \$135M. Alternative 1 cost estimates was used for the CMIA application.

### Project Schedule

O The project schedule assumes 2 years for completion of PA/ED phase starting June 2007 (to be completed in June 2009) and 1.5 years to complete the PS&E phase (to be completed in December 2010). Construction is anticipated to take 2 years with a projected start date of September 2011. The start date for the PA/ED phase is based on when CMIA funds would be available for the project.

### Project Benefits:

- o The project benefits were derived from the following documents:
  - Draft Project Study Report, completed in Jan 12, 2007.
  - I-680 Investment Options Study, completed in 2003.

Project will shorten the HOV Gap in the I-680 NB corridor by approximately 4 miles and will encourage carpooling by allowing HOVs to bypass congested mixed-flow travel lanes.

### Project Contingency Funding

o The project cost estimate was developed based on the draft Project Study Report. A 3% escalation rate was used to project costs in 2011, the year construction is expected to start.

Should the project cost increase, funding for the increase will be secured from future STIP or local funding sources.

District:	4	Project # EA: 0A	41 610k
PROJECT:	I-680 NB HOV Gap Closure from N. Main to SR242	PPNO:	5101
			_

1A PROJEC	T DATA
Type of Project Select project type from list	Enter HOV restriction in section 1B
Project Location (enter 1 for So. Cal., 2 for No. 0	
Length of Construction Period	2 years Existing
Length of Peak Period(s) (up to 8 hrs)	4 hours

lighway Design	Existing	New
Number of General Traffic Lanes	4	4
Number of HOV Lanes	0	1
HOV Restriction (2 or 3)	2	
Highway Free-Flow Speed	65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	3.1	3.1
Affected Area	3.1	3.1
Average Daily Traffic	105.000	
Current	125,000	
	w/o Project	w/ Project
Base (Year 1)	129,448	129,448
Forecast (Year 20)	171,705	171,705
Average Hourly HOV Traffic (if HOV lanes)	2,000	2,000
Percent Traffic in Weave (if oper. improvement)		
Percent Trucks (include RVs, if applicable)	3.8%	3.8%
ruck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)		0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		<u> </u>
Motoring Gratogy (1, 2, 3, 61 D, 11 011-1411) proj.)		
<u> </u>		

### (1C) **HIGHWAY ACCIDENT DATA** Actual 3-Year Accident Data for Facility 0.00 Fatal Accidents Injury Accidents Property Damage Only (PDO) Accidents 126 0.30 267 0.63 Statewide Average for Highway Classification Accident Rate (per million vehicle-miles) 0.83 0.51% 32% Percent Fatal Accidents Percent Injury Accidents

-	

### TOTAL CMIA PROJECT COSTS (in escalated dollars)

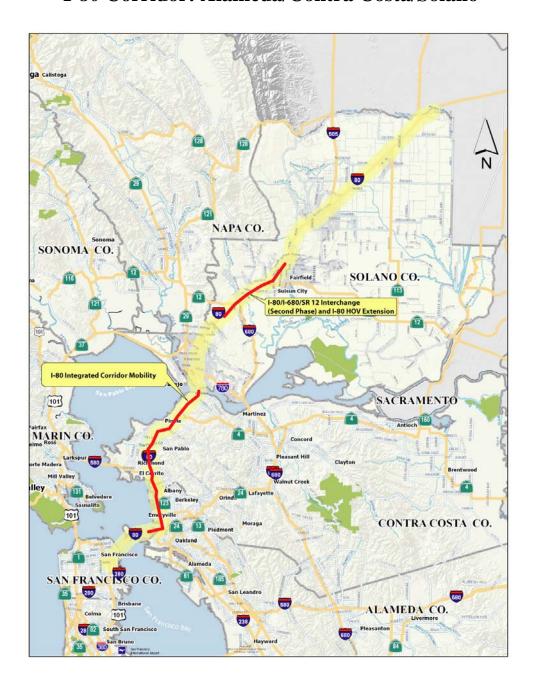
rom Project Nomination Fact Sheet:								
Fiscal Yea	r:							
Before		1						
2007-08	2,100,000							
2008-09	2,100,000							
2009-10	2,100,000							
2010-11	4,900,000							
2011-12	4,900,000							
2012-13	4,900,000							
After								
		•						
TOTAL	\$ 21,000,000							
Escalation Factor	3.5%							
•		•						

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

Prepare Model for Second Road

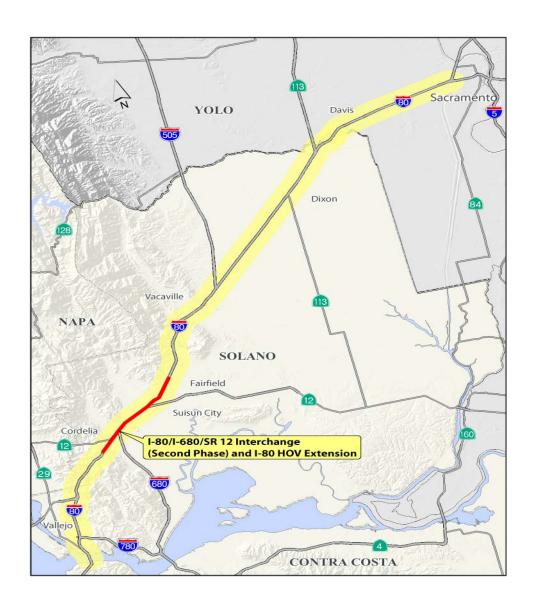
## Metropolitan Transportation Commission Corridor Mobility Improvement Account Program of Projects

## I-80 Corridor: Alameda/Contra Costa/Solano



## **Project Location Map**

I-80/I-680/SR-12 Interchange, with HOV Lanes from Red Top Rd. to Airbase Pkwy, the North Connector (frontage roads), and Interchange Connector Improvements



### CMIA PROJECT NARRATIVE

### I-80/I-680/SR 12 Interchange Project – Phase A in Solano County

### **Travel Corridor Description**

I-80 has been identified by the State as an Interregional Road System route, and is a major transcontinental Interstate between the San Francisco Bay Area and the East Coast. Within California, the highway connects the Bay area to the Sacramento metropolitan region and provides connectivity to I-5 to the north via I-505.

The I-80 East corridor extends from the Carquinez Bridge (Solano/Contra Costa County line) to the Solano/Yolo County line. It is approximately 44 miles in length and intersects with I-780, SR 37, SR 12, I-680, I-505 and SR 113. Growth in Solano County has had a significant effect on the transportation demand on I-80 due not only to I-80's connection to destinations outside the county and a lack of local facilities paralleling the Interstate. This Interstate, as one of two such facilities that extend east of the region, is vital to interregional and regional commuting, freight movement and recreational travel. Historically, daily traffic volumes on the I-80 Solano Corridor have been greater Friday through Sunday than Monday through Thursday

### **Project Function**

The proposed project will improve the most critical 9-mile section of this freeway, centered around the I-80/I-680/SR-12 Interchange. This initial phase of improvements will alleviate existing and future congestion along this corridor by adding capacity at the most vital freeway segments. The project will also provide eight miles of HOV lanes, construct a much-needed local reliever route, and upgrade the facility to enhance safety and meet operational requirements.

### **Project Benefits**

### A. Operations and Safety

The proposed I-80/I-680/SR 12 interchange project will improve mobility by increasing capacity, encourage ridesharing by offering time savings to users of the new HOV lanes, and more efficient operation through the construction of new freeway-to-freeway connectors and modified interchanges. The project will also enhance safety and accessibility, with improved bicycle and pedestrian access, and upgraded local roads and transit access.

The interchange, at the convergence of two interstate freeways and a major state highway, is already congested during both the morning and evening commutes. Currently, I-80 is congested approaching I-680 and SR 12, causing about five minutes of delay at each approach in both peak directions. Also, northbound I-680 approaching the 80/680 interchange is significantly congested in the PM peak, with delays of about 10 minutes. All of these delays totaling about 1700 vehicle hours cause disruption not only to weekday commuters and trucks, but also for recreational vehicles on weekends.

Land use along the I-80 corridor through Solano County is rapidly changing with new residential and commercial development, which will contribute to future congestion. This condition will worsen with the projected 46% increase in workers commuting to and from Solano County by 2020,

In July2004, the Solano Transportation Authority (STA) released the I-80/I-680/I-780 Major Investment & Corridor Study (MIS) to develop a long range, multi-modal transportation plan for the main corridors within Solano County. This document was sponsored by STA in close collaboration with Caltrans District 4.

### B. Air Quality

The nine-county region is part of the San Francisco Bay Area Air Quality Basin. The region currently meets the national attainment standards for Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter ( $PM_{10}$ ), fine Particulate Matter ( $PM_{2.5}$ ), and lead. The area has been designated a marginal nonattainment area for Ozone based on current federal standards. Additionally, the region does not meet the current state standards for Ozone,  $PM_{10}$  and  $PM_{2.5}$ , but is in attainment for the other pollutants listed above. The projected reductions in daily vehicle hours of delay from this project will have a beneficial effect on air quality, as air pollutant emission reductions are realized from increased travel times and speeds. This project is included in the current RTP and in the air quality conformity analysis, and is therefore part of a conforming transportation plan.

### C. Access to Jobs, Housing, Markets, and Commerce

The I-80 East Corridor carries significant levels of interregional recreation, commuter and freight traffic, and serves as the second Interstate other than I-580 that connects the Bay Area to I-5. I-80 provides access to major interregional and regional Goods Movement corridors including I-5, SR 99, US 101 and I-880. Per the Regional Goods Movement Study currently being developed by the Metropolitan Transportation Commission (MTC), I-80 is one of the four primary truck corridors in the Bay Area. Over the next 25 years, anticipated employment growth in Contra Costa and Solano Counties will increase by approximately 55%. In addition to this projected employment boom, population and numbers of households in both counties are expected to increase by approximately 47%.

### **Project Risks**

The project is currently in the environmental document phase. Cost, schedule and scope risks involve the need for timely review and approval of the environmental document and mitigation requirements by resource agencies, as well as permit issuance. Other risks include right-of-way acquisition, utilities relocation, design changes due to new information, and geotechnical investigations or risk design before environmental approval. Execution of pertinent agreements and construction market volatility are additional risks. The capital cost estimate assumes a 3.5% per year escalation.

### Corridor System Management Plan / Preserving Project Mobility Gains

Caltrans District 4 and the Metropolitan Transportation Commission (MTC) have recently launched a joint effort entitled the Freeway Performance Initiative. The intent of

this effort is to advance a corridor based and performance driven Transportation Planning process, employing tested System Management principles and strategies to maximize the efficiency of the existing transportation infrastructure. A team of stakeholders within the corridor is now forming and a consultant team has been selected to begin a detailed performance assessment.

A strategic management plan will be developed to determine the most appropriate and cost-effective means to sustain mobility in the corridor, including ramp metering, enhanced integration between the freeway and transit, and improved incident management practices. Preliminary analysis and recommended strategies are anticipated by the summer of 2007. This initial planning work would lead into the development of an implementation plan for which Solano County has applied for a \$250,000 State Planning & Research grant

Caltrans District 4, MTC and Solano County are committed to the efficient management of this corridor. TOS equipment, including traffic monitoring devices and motorist information systems, are included as integral elements of this project. In addition, MTC has nominated a separate project CMIA funding, which would install TOS infrastructure on other parts of the I-80 corridor through Solano County that are currently minimally equipped.

Preservation of mobility gains on this corridor are also closely linked with land use and development. Because the freeway serves as the only major transportation link on most of the corridor, MTC is sponsoring an interregional study analyzing the potential benefits of smart growth for transportation and air quality along the I-80 corridor from Solano County through Sacramento to Placer County. The study is being conducted in partnership with the Association of Bay Area Governments, the Solano Transportaion Authority, SACOG and Caltrans.

### APPENDIX A

### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

### **Project Nomination Fact Sheet**

Nominating Agenc	y: Solano Transportation Authority		Fact Sheet Date:	01/11/07
Contact Person	Janet Adams			
Phone Number	(707) 424-6010	Fax Number	(707) 424-6074	
Email Address	jadams@sta-snci.com			

County	Caltrans District	PPNO *	EA *	Region/	Region/MPO/ TIP ID*		Route / Corridor *	Post Mile Back *	Post Mile Ahead *
Solano	4	5301L	0A5300				80	10.2	19.3
* NOTE: PPNO & EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO. Route/Corridor & Post Mile Back/Ahead used for State Highway System.									
Legislative Districts	Senate:	4			Congres	sional:	1, 7		
Logislative Biotricto	Assembly:	8							
Implementing Agency	PA&ED:	Solano Transp	ortation Authori	ty (STA)	PS&E:	STA			
(by component)	R/W:	TBD			CON: Caltrans				

Location - Project Limits - Description and Scope of Work (Provide a project location map on a separate sheet and attach to this form)

Along the Interstate 80 (I-80) corridor in Fairfield, between State Route 12 (SR-12) West and SR-12 East in Solano County. This project proposes to improve traffic operations and congestion within the interchange. The entire I-80/I-680/SR-12 Interchange project, which consists of modification of the existing interchange, the addition of freeway lanes, the relocation of truck scales facilities, the construction of new interchanges, auxiliary lanes, high-occupancy vehicle (HOV) lanes, and frontage roads (North Connector) within and adjacent to existing freeway rights of way, is estimated to cost approximately \$1.2 billion. Phase A includes HOV lanes from Red Top Road to Airbase Parkway, North Connector, and the geometric and operational improvements to the I-80/I-680/SR-12 connectors, and is estimated to cost \$323 million.

### Description of Major Project Benefits

The project would alleviate existing and projected congestion along this corridor, as the I-80/I-680/SR-12 interchange is the predominant interchange in this major commute and freight corridor. The project would improve mobility in the corridor with better freeway-to-freeway connections and better access to and from I-80. The project would upgrade the facility to meet safety and operational requirements, as the interchange was built almost 30 years ago, and would also provide improved bicycle and pedestrian access, improved access for transit, and improved local roads.

Expected Source(s) of Additional Funding Necessary to Complete Project - as Identified Under 'Additional Need'

Project Delivery Milestones (month/year):				
Project Study Report (PSR) complete	Mar-02			
Notice of Preparation Document Type: EIR/EIS	May-03			
Begin Circulation of Draft Environmental Document	Jan-09			
Final Approval of Environmental Document	Aug-09			
Completion of plans, specifications, and estimates	Jan-11			
Right-of-way certification	Feb-12			
Ready for advertisement	Apr-12			
Construction contract award	Jul-12			
Construction contract acceptance	Feb-15			

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hg/transprog/ and at: http://www.catc.ca.gov/

## CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan

(dollars in thousands and escalated)

Shaded fields are automatically calculated. Please do not fill these fields.

				<b>Date:</b> 11-Jan-07
County	CT District	PPNO *	EA*	Region/MPO/TIP ID *
Solano	4	5301L	0A5300	0
Project Title:	I-80/I-680/SR	12 Interchange (Phase A) a	and HOV Extension	

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	ject Cost							Project
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	18,975	0	0	0	0	0	0	18,975
PS&E	5,968	2,000	7,300	7,300	3,716	0	0	26,284
R/W SUP (CT) *	100	200	0	700	1,500	873	0	3,373
CON SUP (CT) *	0	300	10,855	0	0	4,500	10,743	26,398
R/W	0	3,000	0	13,000	26,000	12,629	0	54,629
CON	0	13,412	68,602	0	0	30,000	81,739	193,753
TOTAL	25,043	18,912	86,757	21,000	31,216	48,002	92,482	323,412

Corridor Manageme	Corridor Management Improvement Account (CMIA) Program									
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total		
E&P (PA&ED)			·					0		
PS&E			7,300	7,300	3,716			18,316		
R/W SUP (CT) *				700	1,500	873		3,073		
CON SUP (CT) *						4,500	10,743	15,243		
R/W				13,000	26,000	12,629		51,629		
CON						30,000	31,739	61,739		
TOTAL	0	0	7,300	21,000	31,216	48,002	42,482	150,000		

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:	Regional M	leasure 2						
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	6,975							6,975
PS&E	5,968	2,000						7,968
R/W SUP (CT) *	100	200						300
CON SUP (CT) *		300	10,855					11,155
R/W		3,000						3,000
CON		2,000	68,602					70,602
TOTAL	13,043	7,500	79,457	0	0	0	0	100,000

Funding Source:	State Tran	sportation I	mprovemer	nt Program	- RIP - Exis	sting		
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON		11,412						11,412
TOTAL	0	11,412	0	0	0	0	0	11,412

<b>Funding Source:</b>	Traffic Con	gestion Re	lief Prograr	n				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	12,000							12,000
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	12,000	0	0	0	0	0	0	12,000

Shaded fields are automatically calculated. Please do not fill these fields.

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

	Orladed I	iolas are auto	matioally balo	alatoa. 1 load	e do not fill the	oc noido.	Date:	11-Jan-07
County	CT District	PPN	10 *		EA*		Region/MF	O/TIP ID *
Solano	4	530		0A5300			(	
Project Title:	I-80/I-680/SR	12 Interchang	e (Phase A) a	nd HOV Exte	nsion			
* NOTE: PPNO and EA as	signed by Caltrans.	Region/MPO/TIP	ID assigned by R1	PA/MPO				
Funding Source:	State Trans	sportation I	mprovemer	nt Program	- IIP - New			
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON							50,000	50,000
TOTAL	0	0	0	0	0	0		50,000
	-		-		-	-	22,222	,
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W	†							0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:	Duinn	07/00	00/00	00/40	40/44	44/40	40/40	Tatal
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON				_				0
TOTAL	0	0	0	0	0	0	0	0
Additional Funding	Needs (fund	ling needs no	ot vet commit	ted)				1
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13+	Total
E&P (PA&ED)								0
PS&E	†							0
R/W SUP (CT) *	†							0
CON SUP (CT) *	†							0
	†							0
IR/VV								U
R/W CON					n			0
CON TOTAL	0	0	0	0	0	0	0	0

Shaded fields are automatically calculated. Please do not fill these fields.

# BASIS OF PROJECT SCOPE, SCHEDULE, AND BENEFITS I-80/I-680/SR-12 INTERCHANGE (PHASE A)

### Project Scope

- o The scope of this project was developed based on the I-80/I-680/I-780 Major Investment Study (MIS) completed in July 2004. The project scope includes the following elements:
  - Widen I-80 to accommodate an HOV lanes in each direction from Red Top Road to Airbase Parkway
  - Build a new roadway parallel to I-80 from Abernathy Road to Mangels Boulevard
  - Modify I-80/I-680/SR-12 connectors for geometric and operational improvements.

### Project Cost Estimate

- o This project is currently in the environmental phase. The preliminary project estimate was developed based on the following factors:
  - Construction Cost Estimate and Support Costs are in escalated dollars
  - Construction Cost Estimate includes 30% contingency
  - Construction Costs are escalated at 3.5% per year to the middle of the construction period (2013)
  - Construction Engineering and Management Costs are 7% of the Construction Cost Estimate

### Project Schedule

This project is currently in the environmental phase. The project schedule is as follows:

PAED: August 2009
PS&E: January 2011
RTL: March 2012
Begin Construction: July 2012
End Construction: February 2015

### Project Benefits

- o The project benefits were derived from the following:
  - Preliminary project analysis performed with the Solano-Napa Travel Demand Model
  - The Final Technical Memorandum: Existing Weekday Traffic Operating Conditions
  - The Final Technical Memorandum: Design Year 2035 Demand Forecasts at Project Gateways (July 14, 2006)
  - Cordelia Truck Scales Relocation Study Summary Report (February 16, 2005)

### • Transportation 2030 Plan for the San Francisco Bay Area – FINAL – February 2005

RTP (T2030) PROJECT DESCRIPTION	PAGE	ID#
Sol 80 – I-80/I-680/Route 12 Interchange	119	21807
Improvements		22701

(Copies of these reports are available upon request. See Project Narrative for a detailed description of the project benefits.)

### Project Contingency Funding

o The preliminary project cost estimate is based on the current alternatives and scope of the project, with 30% contingency. Future cost increases are anticipated to be funded by future federal, STIP, and local fund sources.

### Project Funding Plan

o The proposed project funding plan reflects the combination of federal, STIP, TCRP, RM2, and CMIA funds. This proposed plan would further the objectives of the CMIA program by ultimately delivering additional improvements and congestion relief earlier than planned. See attached Funding Plan.

District:	4	Project #	2
		EA:	609101
PROJECT:	I-80/I-680/SR 12 HOV Lane (Phase A)	PPNO:	367D

1A PROJECT DATA					
Type of Project	Enter HOV restriction in section 1B				
Select project type from list	HOV Lane				
Project Location (enter 1 for So. Cal., 2 for No.	Cal., or 3 for rural)				
Length of Construction Period	3 years Existing				
Length of Peak Period(s) (up to 8 hrs)	4 hours				

1B HIGHWAY DESIGN AND TRAI	FFIC DAT	Α
Highway Design	Existing	New
Number of General Traffic Lanes	8	10
Number of HOV Lanes	0	2
HOV Restriction (2 or 3)	2	
TIOV Restriction (2 of 3)	2	
Highway Free-Flow Speed	70	70
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	9.1	9.1
Affected Area	9.1	9.1
		•
Average Daily Traffic		
Current	160,000	
	w/o Project	w/ Project
Base (Year 1)	175,000	175,000
Forecast (Year 20)	270,000	270,000
Average Hourly HOV Traffic (if HOV lanes)	1,875	1,875
Percent Traffic in Weave (if oper. improvement)		
Percent Trucks (include RVs, if applicable)	6%	6%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		

#### 1C) **HIGHWAY ACCIDENT DATA** Actual 3-Year Accident Data for Facility Count (No.) 10 0.01 Fatal Accidents Injury Accidents 552 0.35 Property Damage Only (PDO) Accidents 1312 0.82 Statewide Average for Highway Classification Accident Rate (per million vehicle-miles) 0.92 0.92 Percent Fatal Accidents 1.00% 1.00% Percent Injury Accidents 32.0% 32%

L	I.	

### TOTAL CMIA PROJECT COSTS (in escalated dollars)

From Project Nomination Fact Sheet:				
Fiscal Year:				
Before				
2007-08	\$ 21,412,000			
2008-09	\$ 86,757,000			
2009-10	\$ 21,000,000			
2010-11	\$ 31,216,000			
2011-12	\$ 48,002,000			
2012-13	\$ 92,482,000			
After	\$ 22,543,000			
TOTAL	\$ 323,412,000			
Escalation Factor	3.5%			

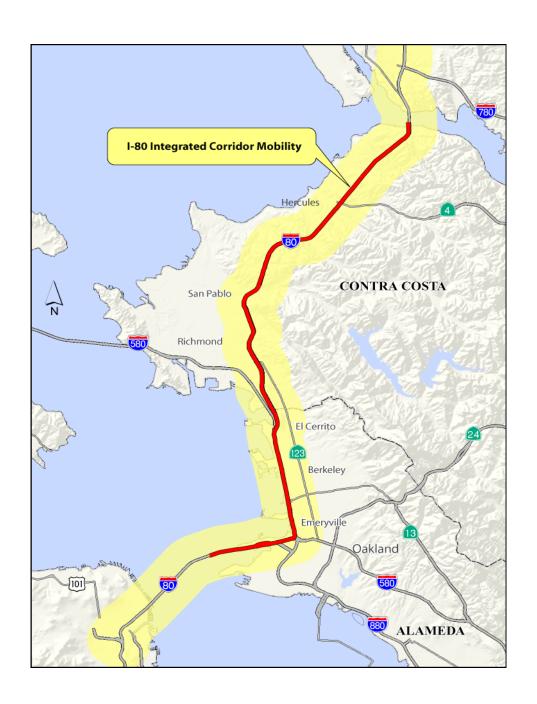
Weaving or TMS Safety Improvement set to 30% to reflect anticipated safety improvement

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

Prepare Model for Second Road

## **Project Location Map**

## **I-80 Integrated Corridor Mobility**



### **CMIA PROJECT NARRATIVE**

ALA/CC 80 Corridor Enhanced Freeway Management System (Bay Bridge to Carquinez Bridge)

### **Travel Corridor Description**

I-80 is included in California's Freeway and Expressway System and has been identified by the State as an Interregional Road System route. I-80 is a major transcontinental Interstate between the San Francisco Bay Area and the East Coast. Within California, the highway connects San Francisco Bay Area with the Sierras via the Sacramento metropolitan region and provides connectivity to I-5 to the north via I-505. It has become increasingly important as a connector for the growing inter-regional commute between the Bay Area and Sacramento.

The I-80 – West Corridor extends from the San Francisco-Oakland Bay Bridge in Oakland to the Carquinez Bridge (Contra Costa/Solano County line). It is approximately 20 miles in length and intersects with SR 13, I-580, I-880 and SR 4. I-80 West is a critical regional commute route between San Francisco, Alameda, Contra Costa and Solano Counties and is a major highway conduit for the movement of freight, providing access to the Ports of Oakland and Richmond. I-80 also serves recreational traffic destined for the Sierras to the east as well as recreational locations to the State's north . Currently the portion of I-80 between the San Francisco-Oakland Bay Bridge and the Carquinez Bridge is specified by the Metropolitan Transportation Commission's (MTC) "2005 State of the System" as the region's most congested corridor.

The I-80 – West corridor is served by regional rail (BART and Amtrak) and ferry service. Additionally, there is local and express bus service throughout the Corridor as well as regional express bus service from Solano County to key intermodal transfer points.

### **Project Function**

This project would create an integrated freeway and arterial management system from the Carquinez Bridge to the San Francisco-Oakland Bay Bridge Toll Plaza, a distance of approximately 20 miles. This project includes Caltrans Traffic Operations Systems (TOS) field elements: Closed Circuit Television (CCTV) cameras, Changeable Message Signs (CMS), Highway Advisory Radio (HAR), and ramp metering. Consistent with the mobility and accessibility goals of the Strategic Growth Plan, the project will involve an integrated information exchange system between Caltrans, East Bay SMART Corridors, the 511 System, and the local agencies to share freeway congestion, ramp metering and local arterial information. A separate project, also proposed for I-Bond funding, will provide system management equipment for the I-80 Corridor's arterial and transit systems, including vehicle detection, emergency vehicle pre-emption, message signs and communications infrastructure.

This project is included in the Regional Transportation Plan. The proposed I-80 Corridor Enhanced Management System project will serve to alleviate existing and projected

congestion along this corridor, as well as upgrade the facility to enhance safety and meet operational requirements.

# **Project Benefits**

# A. Operations and Safety

This project will increase both freeway speeds and capacity, and also improve incident detection and response. The project will include the development and implementation of an Area-wide Adaptive Ramp Metering system. The I-80 project corridor includes 17 freeway ramp connections in Contra Costa County and 6 freeway ramp connections in Alameda County.

Westbound I-80 is consistently the most congested corridor in the Bay Area. I-80 from west of Treasure Island to east of Powell Street is ranked number ten on the list of congested locations, with 2,430 VHD in the PM peak period. Peak hour volumes range from 8,500 to 19,200 vehicles per hour (VPH) for both directions, with 300,000 average daily traffic (ADT). Truck traffic accounts for approximately 1.77% to 5.35% of the peak hour traffic volume. Daily vehicle hours of delay (DVHD) are 10,080 in the AM peak and 2,430 in the PM.

# B. Air Quality

The nine-county region is part of the San Francisco Bay Area Air Quality Basin. The region currently meets the national attainment standards for Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter ( $PM_{10}$ ), fine Particulate Matter ( $PM_{2.5}$ ), and lead. The area has been designated a marginal nonattainment area for Ozone based on current federal standards. Additionally, the region does not meet the current state standards for Ozone,  $PM_{10}$  and  $PM_{2.5}$ , but is in attainment for the other pollutants listed above. The projected reductions in DVHD from this project will have a beneficial effect on air quality, as air pollutant emission reductions are realized from increased travel times and speeds.

In February, 2005, the MTC adopted the 25-year Regional Transportation Plan (RTP). The transportation air quality conformity analysis of the Plan resulted in a positive conformity finding. This project is included in the current RTP and in the air quality conformity analysis, and is therefore part of a conforming transportation plan.

# C. Access to Jobs, Housing, Markets, and Commerce

The I-80 corridor carries significant volumes of inter-regional recreation, commuter and goods movement traffic and serves as the second interstate, other than I-580, to connect to I-5 in the region. I-80 provides access to major inter-regional and regional freight corridors including I-5, SR 99, US-101 and I-880. Conflicting demands between high volumes of commuter and freight traffic cause major operational deficiencies. I-80 is a major commuter link between employment centers in San Francisco and the East Bay and housing in west Contra Costa and Solano County.

Over the next 25 years, it is anticipated that in Alameda and Contra Costa Counties, the creation of new jobs will increase by 46% while both counties' population and number of

households will increase by approximately 30%. The potential for housing growth in this segment of I-80 is limited because of geographical and land use compatibility constraints. However, there is potential for moderate redevelopment and infill development along the Corridor. Therefore, it is possible that the Alameda and Contra Costa I-80 Corridor Enhanced Management System, coupled with capacity improvements, could improve access to existing land uses along the corridor and induce some growth. The project will also improve access to new housing in west and central Solano County.

### **Project Risks**

Ramp Metering – The implementation of ramp metering in this project will require institutional agreements and may face opposition by the local agencies, especially if the improvements to the arterial and transit management systems, which are proposed as a separate I-Bond project, are not implemented in conjunction with this project. The risk level is medium and could impact the schedule.

Communication System – Additional communication infrastructure along the corridor may be required which would increase the project cost. The risk level is medium and could impact the cost.

Shoulder Width – The non-standard shoulder widths in this project will require Design Exceptions. The risk level is low but could impact the schedule and cost.

# **Corridor System Management Plan / Preserving Mobility Gains**

Caltrans District 4 and the Metropolitan Transportation Commission have recently launched a joint effort entitled the Freeway Performance Initiative. The intent of this effort is to advance a corridor based and performance driven Transportation Planning process, employing tested System Management principles and strategies to maximize the efficiency of the existing transportation infrastructure. I-80 is one of the 12 "Key Corridors" identified for analysis and development of a Corridor System Management Plan over the next 18 months.

In essence, this proposal is purely a system management project intended to ensure that the corridor operates as efficiently as possible. HOV lanes are already in operation through most of the corridor, and two programmed projects in Contra Costa County would complete the HOV system between the Bay Bridge and the Carquinez Bridge. Because there is almost no remaining right-of-way to add more lanes to the freeway, the only viable means to increase capacity and reliability is through effective system management. In this corridor, 20 CCTVs, 6 CMSs, 5 EMSs, 2 HARs and 117 Traffic Monitoring Stations are in place. This proposed project would include installing and implementing ramp metering, and filling in the gaps in the TOS infrastructure in the corridor.

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT

# **Project Nomination Fact Sheet**

Nominating Ager	ncy: Alameda County Congestion	n Management Agency	Fact Sheet Date:	01/11/07
Contact Person	Frank Furger			
Phone Number	(510) 836-2560	Fax Number	(510) 836-2185	
Email Address	ffurger@accma.ca.gov	_		

Project Information	n:							
County	Caltrans District	PPNO *	EA*	Region/MI	PO/ TIP ID*	Route / Corridor *	Post Mile Back *	Post Mile Ahead
Alameda	4	0062E	3A7700K			80	1.9	8.0
Contra Costa	4	0062E	3A7700K			80	0	13.5
NOTE: PPNO & EA as	signed by C	altrans. Region/	MPO/TIP ID assi	gned by RTPA/M	PO. Route/Corri	dor & Post Mile I	Back/Ahead used for S	tate Highway Syster
_egislative Districts	Senate:	7, 9			Congressional	: 7, 9		
	Assembly:	11, 14, 16						
mplementing Agency	PA&ED:	ACCMA/Caltra	ans		PS&E: ACC	CMA/Caltrans		
by component)	R/W:	ACCMA/Caltra	ans		CON: ACC	CMA/Caltrans		
Project Title	I-80 Inte	grated Corri	dor Mobility	Project				
ocation - Project Lim	•			•				
Description of Major P This stretch of Route this corridor. The pelocal arterial and sig Incident Manageme	e 80 is the roject will i nal contro nt System	e most conge produce the i ol systems. T us including C	implementatic The project wil CCTV, CMS, a	on of an Area- Il also include and Emergenc	wide Adaptive local arterial y pre-emptio	e Ramp mete Advanced Tra n systems at l	ring system that wansportation Mana local intersections	ill include the gement and
Project Delivery Milest	tones (mon	th/year):						
Project Study Report (P	SR) comple	te	Jan-	07				
Notice of Preparation	Document	Туре:	ND-	FONSI				
Begin Circulation of Dra	ft Environme	ental Document	t Dec	-07				
inal Approval of Enviro	nmental Do	cument	Mar-	-08				
Completion of plans, spe	ecifications,	and estimates	Jan-	09				
Right-of-way certfication	1		Jan-	09				
Ready for advertisemen	t		Mar-	-09				
Construction contract av	ward		Jul-0	)9				
Construction contract ac	ccentance		Oct-	11				

The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet. A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan**

(dollars in thousands and escalated)
Shaded fields are automatically calculated. Please do not fill these fields.

				<b>Date:</b> 11-Jan-07
County	CT District	PPNO *	EA*	Region/MPO/TIP ID *
Alameda	4	0062E	3A7700K	0
Project Title:	I-80 Integrate	d Corridor Mobility Project		

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	Proposed Total Project Cost							
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	0	2,600	0	0	0	0	0	2,600
PS&E	0	0	9,000	0	0	0	0	9,000
R/W SUP (CT) *	0	0	0	0	0	0	0	0
CON SUP (CT) *	0	0	0	11,700	0	0	0	11,700
R/W	0	0	0	0	0	0	0	0
CON	0	0	0	64,400	0	0	0	64,400
TOTAL	0	2,600	9,000	76,100	0	0	0	87,700

Corridor Manageme	ent Improvem	ent Account	(CMIA) Progi	ram				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	0	1,800						1,800
PS&E		0	6,300					6,300
R/W SUP (CT) *								0
CON SUP (CT) *			0	8,200				8,200
R/W								0
CON			0	47,000				47,000
TOTAL	0	1,800	6,300	55,200	0	0	0	63,300

\* NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:	I-BOND SI	HOPP Loca	l Signal Sy	nchronizati	on Program	ı (ITS) - Ne	W	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)		800						800
PS&E			2,700					2,700
R/W SUP (CT) *								0
CON SUP (CT) *				3,500				3,500
R/W								0
CON				17,400				17,400
TOTAL	0	800	2,700	20,900	0	0	0	24,400

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

							Date:	11-Jan-07
County	CT District	PPN			EA*		Region/MF	O/TIP ID *
Alameda	4	006			3A7700K		(	)
Project Title:	I-80 Integrate							
* NOTE: PPNO and EA as	signed by Caltrans.	Region/MPO/TIP	ID assigned by RT	PA/MPO				Ī
Funding Source:			T					
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:							-	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
-								
Additional Funding	· · · · · ·							
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13+	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

# BASIS OF PROJECT SCOPE, COST, SCHEDULE, AND BENEFITS 1-80 INTEGRATED CORRIDOR MOBILITY PROJECT

### Project Scope

o This project is currently in the planning phase. The project scope was developed based on information from the ongoing Project Study Report (PSR). The PSR is schedules to be completed by early January 2007. The project scope does not include implementation of advisory speed limits signs and commercial vehicle operation systems, which scope is included in the CMA's submittal.

### Project Cost Estimate

Costs used in this application are based on scope information from the ongoing Project Study Report. The project cost was based on the following factors:

- o Cost does not include implementation of advisory speed limits signs and commercial vehicle operation systems (\$6.4M), which is included in the CMA's submittal.
- o Capital cost is based on a 7% escalation rate compounded annually to mid year of construction.
- Support cost is based on 4% compounded annually for professional services
- o Assumes total support cost to be 34% of capital
- o Assumes no right of way impacts.

# Project Schedule

o The schedule was developed based on information from the ongoing Project Study Report. It assumes a design at risk approach in which the environmental clearance effort and final design effort will be undertaken concurrently. It is based on a 12 months environmental approval (mitigated ND/FONSI), and no right of way or utility impacts.

### Project Benefits:

- o The project benefits were derived from the following documents:
  - Information from studies for the PSR underdevelopment

Transportation 2030 Plan for the San Francisco Bay Area – FINAL – February 2005 Appendix one – Projects by County

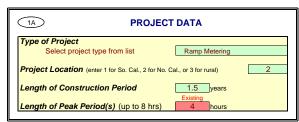
RTP (T2030) Project Description	Page	ID#
Bay Area Region/Multi-County – Freeway traffic Operations (includes Traffic Operations	80	21001
System/Transportation Management Center enhancements, Freeway Service Patrol, incident		
management and technical assistance)		

(Copies of these reports are available upon request. See Project Narrative for a detailed description of the project benefits)

# Project Contingency Funding

o The project cost estimate was developed based on a 15% contingency and a 7% construction cost escalation rate extended to midyear of construction. Should the project cost increases, funding for the increase will be secured from future STIP or other funding sources.

District:	4	Project #	1a
PROJECT:	I-80 Enhanced freeway management system including CCTV, CMS, loop detectors, and	EA: PPNO:	
	communications network and Ramp Metering (Bay Bridge - CC Co. Line) - Ramp Metering		



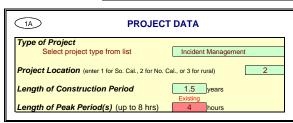
1B HIGHWAY DESIGN AND TRAF	FIC DAT	A
Highway Design	Existing	New
Number of General Traffic Lanes	8	8
Number of HOV Lanes	2	2
HOV Restriction (2 or 3)	3	
Highway Free-Flow Speed	65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	21.0	21.0
Affected Area	21.0	21.0
Average Daily Traffic  Current	200,000	18.1.1
<b>5</b> 0/ 0	w/o Project	w/ Project
Base (Year 1)	204,134	204,134
Forecast (Year 20)  Average Hourly HOV Traffic (if HOV lanes)	256,500 2.064	256,500 2.064
Percent Traffic in Weave (if oper. improvement)	2,004	2,004
Percent Trucks (include RVs, if applicable)	5.16%	5.16%
Truck Speed (if passing lane project)	0.1070	0.1070
Track opeca (ii passing lane project)	ı	
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		

1C HIGHWAY ACCIDENT DATA			
Actual 3-Year Accident Data for Facility			
	Count (No.)	Rate	
Fatal Accidents	21	0.00	
Injury Accidents	1406	0.31	
Property Damage Only (PDO) Accidents	4841	1.05	
Statewide Average for Highway Classification	n		
	Existing	New	
Accident Rate (per million vehicle-miles)	1.14	1.03	
Percent Fatal Accidents	0.70%	1.00%	
Percent Injury Accidents	31.7%	21.0%	

rom Project Nomination Fact Sheet:			
Fiscal Yea	r.		
110001100			
Before			
2007-08	\$ 6,382,373		
2008-09	\$ 4,254,915		
2009-10	\$ 11,155,119		
2010-11	\$ 7,436,746		
2011-12			
2012-13			
After			
		•	
TOTAL	\$ 29,229,153		
Escalation Factor	3.5%		

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project # EA:	11
PROJECT:	I-80 Enhanced freeway management system including CCTV, CMS, loop detectors, and	PPNO:	
	communications network and Ramp Metering (Bay Bridge - CC Co. Line)- Incident Management		



1B HIGHWAY DESIGN AND TRAF	FIC DAT	Α
Highway Design	Existing	New
Number of General Traffic Lanes	8	8
Number of HOV Lanes	2	2
HOV Restriction (2 or 3)	3	
Highway Free-Flow Speed	65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	21.0	21.0
Affected Area	21.0	21.0
Average Daily Traffic		
Current	200,000	
	w/o Project	w/ Project
Base (Year 1)	204,134	204,134
Forecast (Year 20)	256,500	256,500
Average Hourly HOV Traffic (if HOV lanes)	2,064	2,064
Percent Traffic in Weave (if oper. improvement)		
Percent Trucks (include RVs, if applicable)	5.16%	5.16%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		
		ı
-		

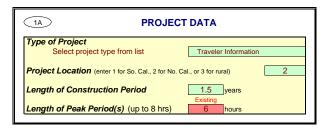
1C HIGHWAY ACCIDENT DATA			
Actual 3-Year Accident Data for Facility			
	Count (No.)	Rate	
Fatal Accidents	21	0.00	
Injury Accidents	1406	0.31	
Property Damage Only (PDO) Accidents	4841	1.05	
Statewide Average for Highway Classification			
Statewide Average for Highway Classificat		Na	
	Existing	New	
Accident Rate (per million vehicle-miles)	Existing 1.14	1.03	
, , , , , , , , , , , , , , , , , , ,	Existing		

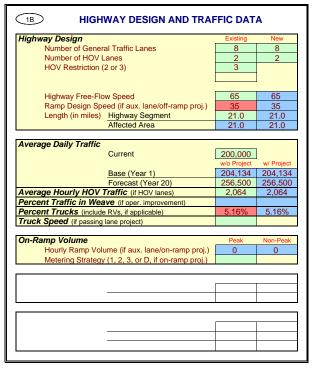
$\bigcirc$			
-			

From Project Nomination Fact Sheet:				
Fiscal Yea	r:			
Before				
2007-08	\$ 6,382,373			
2008-09	\$ 4,254,915			
2009-10	\$ 11,155,119			
2010-11	\$ 7,436,746			
2011-12				
2012-13				
After				
'		,		
TOTAL	\$ 29,229,153			
Escalation Factor				
		ļ!		

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project #	10
PROJECT:	100 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	EA: PPNO:	
	I-80 Enhanced freeway management system including CCTV, CMS, loop detectors, and communications network and Ramp Metering (Bay Bridge - CC Co. Line) - Traveler Information		





1C HIGHWAY ACCIDENT DATA			
Actual 3-Year Accident Data for Facility			
	Count (No.)	Rate	
Fatal Accidents	21	0.00	
Injury Accidents	1406	0.31	
Property Damage Only (PDO) Accidents	4841	1.05	
Statewide Average for Highway Classification			
	Existing	New	
Accident Rate (per million vehicle-miles)	1.14	1.03	
Percent Fatal Accidents	0.70%	1.00%	
Percent Injury Accidents	31.7%	21.0%	

$\bigcirc$			

From Project Nomination Fact Sheet:			
Fiscal Yea	r:		
Before 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 After	\$ 6,382,373 \$ 4,254,915 \$ 11,155,119 \$ 7,436,746		
	\$ 29,229,153 3.5%		

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

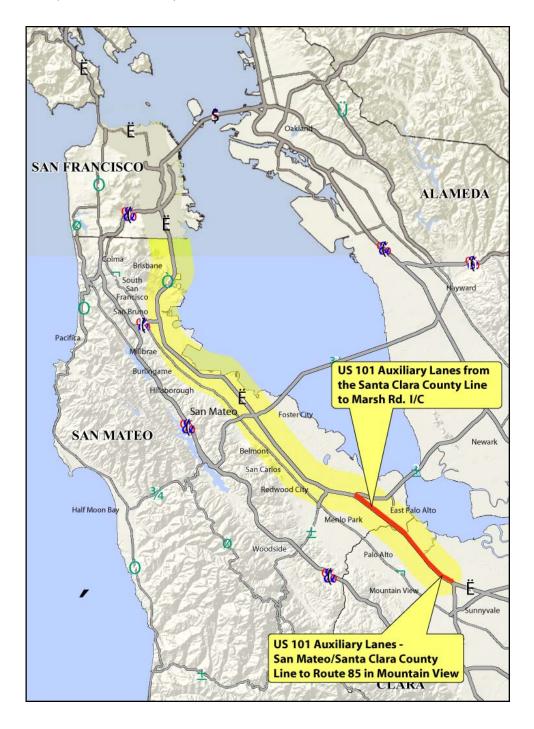
# Metropolitan Transportation Commission Corridor Mobility Improvement Account Program of Projects

# U.S. 101 Corridor: San Mateo/Santa Clara



# **Project Location Map**

US-101 Additional Lanes SR 84 (Marsh Road) in San Mateo to SR 85 in Santa Clara



### CMIA PROJECT NARRATIVE

U.S. 101 Peninsula Corridor in San Mateo and Santa Clara County: Auxiliary lanes from Marsh Road to SR 85 (including Willow Road Interchange)

### **Travel Corridor Description**

On a national and state level, US 101 is part of the Interregional Road System and the National Truck Network. It is a major north-south route along and near the coast between Los Angeles, at I-5, and the Pacific Northwest via the San Francisco Bay Area and is the backbone of the circulation system for many cities and communities in the region. US 101 is identified in the State's Interregional Transportation Strategic Plan as a "focus route", which assigns this freeway as requiring the highest priority for completion to the minimum facility standard in the 20-year planning period. It is also a Caltrans focus route according to the 1998 Interregional Transportation Strategic Plan. Regionally, the Metropolitan Transportation Commission identifies US 101 as one of the four major "Interregional Corridors" within the Bay Area's transportation system.

US 101 between Marsh Road in Santa Clara County and SR 85 in Santa Clara County currently experiences significant congestions, and this congestion has been forecasted to grow with traffic demand through year 2025. Additionally, statistics regarding vehicle collisions along US 101 indicate that collision rates that are substantially higher than the statewide average. These facts define the need to address congestion and safety. Therefore, the purpose of the project is to address congestion and safety issues in this section of US 101.

### **Project Function**

The project proposed for CMIA funding would add auxiliary lanes in both directions of Route 101 between Marsh Road and SR 85, and reconstruct the Willow Road interchange. The freeway would be widened to a 10-lane cross section between interchanges.

The CMIA application consists of two components as reflected in the associated Fact and Funding sheets: (1) construction of auxiliary lanes on US 101 in San Mateo County between Marsh Road and the San Mateo/Santa Clara County Line, including reconstruction of the Willow Road interchange, and (2) construction of auxiliary lanes in Santa Clara County between the San Mateo/Santa Clara County Line and SR 85.

### **Project Benefits**

### A. Operations and Safety

The substantial growth in jobs and housing has increased pressure along the U.S. Route 101 Peninsula corridor, raising it to the 4<sup>th</sup> most congested corridor in the Bay Area. The project will serve to alleviate existing and projected congestion along this corridor as well as upgrade the facility to meet safety and operational requirements.

The auxiliary lanes will reduce delays and enhance safety in areas where there are currently merge/weave conflicts between traffic entering and existing the freeway. In addition, the auxiliary lanes will be important components of a more dynamic ramp metering strategy on the US 101 Peninsula Corridor. Metering is scheduled to begin on this section of the corridor in late January 2007.

The project is one of the solutions identified in a Bi-County study, the 2020 Peninsula Gateway Corridor Study, that was jointly funded by the Congestion Management Agencies for San Mateo and Santa Clara Counties (C/CAG and VTA) as well as the San Mateo County Transportation Authority (SMCTA) and involved participation by six neighboring cities including Menlo Park, East Palo Alto, Palo Alto, Mountain View, Atherton, and Redwood City, as well as Caltrans and MTC. Elected officials, executive staff, as well as representatives from the above agencies, have actively collaborated with each other and with community representatives through the 2020 Gateway Study, from 2003 through the present, to develop solutions to the transportation problems in the corridor. This project, along with other projects identified from the Study, will provide the much-needed solution to existing system deficiencies, relieve traffic congestion, improve safety and air quality, and improve economic vitality.

## B. Air Quality

The nine-county region is part of the San Francisco Bay Area Air Quality Basin. The region currently meets the national attainment standards for Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter ( $PM_{10}$ ), fine Particulate Matter ( $PM_{2.5}$ ), and lead. The area has been designated a marginal nonattainment area for Ozone based on current federal standards. Additionally, the region does not meet the current state standards for Ozone,  $PM_{10}$  and  $PM_{2.5}$ , but is in attainment for the other pollutants listed above.

In February 2005, the MTC adopted the 25-year Regional Transportation Plan (RTP). The transportation air quality conformity analysis of the Plan resulted in a positive conformity finding. This project is included in the current RTP and in the air quality conformity analysis, and is therefore part of a conforming transportation plan. In addition, the projected reductions in daily vehicle hours of delay from this project will have a beneficial effect on air quality, as air pollutant emission reductions are realized from increased travel times and speeds.

# C. Access to Jobs, Housing, Markets, and Commerce

There are nine interchanges within the project limits that provide access to various parts of the region. In San Mateo County, US 101 is the main access route to SFO. From the Peninsula, it serves as a major route to Silicon Valley and to the Mineta San Jose International Airport. It links with the East Bay via the Dumbarton Bridge (SR 84), the San Mateo Bridge (SR 92), and the San Francisco-Oakland Bay Bridge, and provides access to the Port of Redwood City, and the Port of San Francisco. It also provides access to local streets, which includes commercial and residential developments, Stanford University, the Google campus, and many other business districts.

Per San Mateo County's Countywide Transportation Plan 2010, dated April 2001, a relatively high percentage (43%) of San Mateo County residents will commute to jobs in other counties. In 1990, this was the highest percentage of out-commuting for any county in the Bay Area. In 2010, as in 1990, a relatively high percentage of workers (36%) in the county will be non-resident workers who commute in from other counties. In 1990, this was the second highest percentage for in-commuting for any county in the Bay Area. It is projected that by 2010 there will be a shortfall of 15,600 to 20,600 housing units in the county.

# **Project Risks**

Project risks are minimal. The San Mateo County portion of this proposal requires minimal right-of-way, and there is no known opposition to the project.

The Santa Clara County portion has an approved Environmental document, and is ready to proceed into Final Design, greatly minimizing uncertainty with respect to cost and schedule. Moreover, no additional right of way is required.

# **Corridor System Management Plan / Preserving Mobility Gains**

Caltrans District 4 and the Metropolitan Transportation Commission (MTC) have recently launched a joint effort entitled the Freeway Performance Initiative. The intent of this effort is to advance a corridor based and performance driven Transportation Planning process, employing tested System Management principles and strategies to maximize the efficiency of the existing transportation infrastructure. US 101 is one of the 12 "Key Corridors" identified for analysis and development of a Corridor System Management Plan over the next 18 months.

San Mateo and Santa Clara County have been supportive of system management strategies and have worked closely with Caltrans and MTC in a number of programs to preserve mobility in this corridor. A ramp metering feasibility study was completed in 2005, which led to an agreement between the counties and the cities along the corridor to proceed with metering, as well as an MOU between the county and Caltrans. The first phase of ramp metering is scheduled to begin in January 2007. A countywide Intelligent Transportation System Strategic Plan was completed in 2005, which is leading to an incident management plan for the Route 101 corridor, scheduled to begin development in Spring 2007. This plan will involve coordination with Smart Corridor improvements that have already been implemented on El Camino Real (SR 82) that parallels the freeway. A separate CMIA application is being submitted to fill in TOS infrastructure gaps on the US 101 Peninsula Corridor.

#### APPENDIX A

### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

### **Project Nomination Fact Sheet**

Nominating Agency: San Mateo Cities/County Association of Governments Fact Sheet Date: 01/11/07								
Contact Person	Richard Napier							
Phone Number	(650) 599-1420	Fax Number	(650) 361-8227					
Email Address	slwong@co.sanmateo.ca.us							

County	Caltrans District	PPNO *	EA *	Region/MPO/ TIP ID*		Route / Corridor *	Post Mile Back *	Post Mile Ahead *		
San Mateo	4	658B	235610	SM-0	30001	101	0	3.6		
* NOTE: PPNO & EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO. Route/Corridor & Post Mile Back/Ahead used for State Highway System.										
Legislative Districts	Senate:	8, 11			Congressional: 14, 12					
Logiolativo Biotrioto	Assembly:	Assembly: 21								
Implementing Agency	PA&ED:	Caltrans			PS&E: Cal	trans				
(by component)	component) R/W: Caltrans			CON: Caltrans						
Project Title	US 101 A	Auxiliary Lai	nes from the	Santa Clara	County Line	to Marsh Re	d. I/C			

Location - Project Limits - Description and Scope of Work (Provide a project location map on a separate sheet and attach to this form)

This project will widen US 101 to add auxiliary lanes in each direction from the Embarcadero Road interchange near the Santa Clara County line to the Marsh Road interchange in San Mateo County. This project lies within the Cities of Menlo Park, East Palo Alto and Palo Alto. In addition to adding auxiliary lanes, this project will widen/modify all the on ramps to the four interchanges within the project limits. The project will reconstruct the Ringwood Pedestrian overcrossing and the Henderson underpass to accommodate the Aux lanes and install ITS equipment on the main line consisting of communication trunk lines (fiber optic cables) for efficient data and video communications with Caltrans Transportation Management Center (TMC), CCTV, message signs and traffic detection devices. This project also includes the Willow Road interchange reconstruction (EA 23565\_)

#### Description of Major Project Benefits

The auxiliary lanes will relieve congestion on the freeway mainline, enhance safety, and improve traffic operations at the interchanges. The project will result in continuous auxiliary lanes from the San Mateo/Santa Clara County line to the San Francisco International Airport. It will reduce 3,000,000 vehicle hours of delay. This project is one of the solutions identified to reduce the impact of regional traffic from Highway 101 to the Dumbarton Bridge on the disdvantaged community of the City of Palo Alto. This environmental justice issue was identified by MTC in the Bay Crossings Study and is being studied in a joint San Mateo/Santa Clara County study called the 2020 Peninsula Gateway Study.

Expected Source(s) of Additional Funding Necessary to Complete Project - as Identified Under 'Additional Need'

Project Delivery Milestones (month/year):					
Project Study Report (PSR) complete	Sep-04				
Notice of Preparation Document Type:					
Begin Circulation of Draft Environmental Document	Jan-09				
Final Approval of Environmental Document	Sep-09				
Completion of plans, specifications, and estimates					
Right-of-way certfication	Jan-12				
Ready for advertisement					
Construction contract award	Jun-12				
Construction contract acceptance					

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hg/transprog/ and at: http://www.catc.ca.gov/

### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan**

(dollars in thousands and escalated)
Shaded fields are automatically calculated. Please do not fill these fields.

				Date:	11-Jan-07
County	CT District	PPNO *	EA*	Region/MP	PO/TIP ID *
San Mateo	4	658B	235610	SM-03	30001
Project Title:	US 101 Auxil	iary Lanes from the Santa C	Clara County Line to Marsh Rd. I/C		

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	ject Cost							Project
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	0	5,200	0	0	0	0	0	5,200
PS&E	0	0	6,592	0	0	0	0	6,592
R/W SUP (CT) *	0	0	0	496	0	0	0	496
CON SUP (CT) *	0	0	0	0	12,460	0	0	12,460
R/W	0	0	0	4,910	0	0	0	4,910
CON	0	0	0	0	81,531	0	0	81,531
TOTAL	0	5,200	6,592	5,406	93,991	0	0	111,189

Corridor Manageme	Corridor Management Improvement Account (CMIA) Program								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total	
E&P (PA&ED)		5,200						5,200	
PS&E			6,592					6,592	
R/W SUP (CT) *				496				496	
CON SUP (CT) *					12,460			12,460	
R/W				4,910				4,910	
CON					72,510			72,510	
TOTAL	0	5,200	6,592	5,406	84,970	0	0	102,168	

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:	State Tran	sportation I	mprovemer	nt Plan (ST	IP) - RIP - E	Existing		
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON					9,021			9,021
TOTAL	0	0	0	0	9,021	0	0	9,021

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

							Date:	11-Jan-07
County	CT District	PPN			EA*		Region/MP	
San Mateo	4	658			235610		SM-03	0001
Project Title:					ine to Marsh F	Rd. I/C		
* NOTE: PPNO and EA a	ssigned by Caltrans.	Region/MPO/TIP	ID assigned by RT	PA/MPO				
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
TOTAL	<u> </u>	U <sub>1</sub>	•		· ·		V	<u> </u>
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	1	İ						0
PS&E	1						1	0
R/W SUP (CT) *								0
CON SUP (CT) *	+ +						<del> </del>	0
R/W								0
CON								
	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	1 1101	01700	00/00	00/10	10/11	,	12,10	0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
								0
R/W								
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	1 1101	01700	00/03	03/10	10/11	11/12	12/10	10tai
PS&E	+ +	-					<del>                                     </del>	0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W	1							0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Additional Fundin	a Noode (fund	ing poods no	t vot commit	tod)				1
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13+	Total
E&P (PA&ED)	1 1101	07700	00/03	03/10	10/11	11/12	12/107	10tai 0
PS&E								0
	1							
R/W SUP (CT) *	1							0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

San Mateo US-101

Comparison of Existing to Proposal Funding

	Current	: Funding		d Funding nds of \$)
Fund Source	101 Aux (Marsh - SCL)	101 Willow I/C	101 Aux (Marsh- SCL)	101 Willow I/C
STIP (Existing)	9,021	20,046	9,021	20,046
STIP (Future)	0	0	0	0
Local (Commited)	19,961	17,622	0	37,583
Other (Not yet identified)	61,808	0	0	0
CMIA	0	0	102,168	0
Total Funding*	90,790	37,668	<u>111,189</u>	57,629
Total Project Cost			111,189	57,629

<sup>\*</sup> **Note:** Consistent with the adopted CMIA Guidelines, the region proposes a funding solution that further the goals of the CMIA program for the 101 Corridor: leverage federal, state, regional, and local funds as part of a comprehensive corridor investment strategy. Additionally, note that project costs in the 101 corridor, including the 101 auxiliary lanes from Third to Millbrae Ave., have increased since the previously submitted funding plans.

### APPENDIX A

# **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

# **Project Nomination Fact Sheet**

Nominating Agence	y: San Mateo Cities/County	Association of Governments	Fact Sheet Date:	01/11/07
Contact Person	Richard Napier			
Phone Number	(650) 599-1420	Fax Number	(650) 361-8227	
Email Address	slwong@co.sanmateo.ca.us			

Project Information	n:						
County	Caltrans District	PPNO *	EA*	Region/MPO/ TIP ID*	Route / Corridor *	Post Mile Back *	Post Mile Ahead
San Mateo	4	0690A	235650	SM-010047	101	1.7	2.1
* NOTE: PPNO & EA ass	signed by Cal	trans. Region/M	PO/TIP ID assigi	ned by RTPA/MPO. Route/Cor	ridor & Post Mile Ba	ack/Ahead used for Stat	e Highway System.
Legislative Districts	Senate:	8, 11		Congression	nal: 12, 14		
Legislative Districts	Assembly:	21					
Implementing Agency	PA&ED:	Caltrans		PS&E: (	Caltrans		
(by component)	R/W:	Caltrans		CON:	Caltrans		
Project Title	US-101/V	Villow Road	I Interchange	Reconstruction			
interchanges. The p Francisco Internation reduce the impact of Palo Alto. This envir	will relieve project will mal Airport of regional ronmental	congestion result in con to the time the time traffic from the time traffic from the time time time time time time time tim	tinuous auxili ce 3,000,000 lighway 101 t was identifie	ay mainline, enhance sa ary lanes from the San vehicle hours of delay. to the Dumbarton Bridge d by MTC in the Bay Ci sula Gateway Study.	Mateo/Santa C This project is on the disdva	lara County line to one of the solution ntaged community	the San s identified to of the City of
Expected Source(s) of	Additional	Funding Nec	essary to Comp	olete Project - as Identified	Under 'Addition	al Need'	
Project Delivery Miles	tones (mon	th/year):					
Project Study Report (P	SR) comple	te					
Notice of Preparation	Document	Туре:					
Begin Circulation of Dra	ft Environme	ental Documen	t				
Final Approval of Enviro	onmental Do	cument					
Completion of plans, sp	ecifications,	and estimates					
Right-of-way certfication	า						
Ready for advertisemer	nt						
Construction contract a	ward						
Construction contract a	cceptance						

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan**

(dollars in thousands and escalated)
Shaded fields are automatically calculated. Please do not fill these fields.

				Date: 11-	-Jan-07			
County	CT District	PPNO *	EA*	Region/MPO/TI	P ID *			
San Mateo	4	0690A	0690A 235650 SM-010047					
Project Title: US-101/Willow Road Interchange Reconstruction								

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

Proposed Total Project Cost								Project
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	0	1,650	0	0	0	0	0	1,650
PS&E	0	0	3,490	0	0	0	0	3,490
R/W SUP (CT) *	0	0	300	0	0	0	0	300
CON SUP (CT) *	0	0	0	0	1,840	0	0	1,840
R/W	0	0	0	10,296	12,178	0	0	22,474
CON	0	0	0	0	27,875	0	0	27,875
TOTAL	0	1,650	3,790	10,296	41,893	0	0	57,629

Corridor Manageme	Corridor Management Improvement Account (CMIA) Program										
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total			
E&P (PA&ED)								0			
PS&E								0			
R/W SUP (CT) *								0			
CON SUP (CT) *								0			
R/W								0			
CON								0			
TOTAL	0	0	0	0	0	0	0	0			

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:	State Tran	State Transportation Improvement Program (STIP) - RIP - Existing								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total		
E&P (PA&ED)		825						825		
PS&E			1,745					1,745		
R/W SUP (CT) *			150					150		
CON SUP (CT) *					1,840			1,840		
R/W				5,148	10,338			15,486		
CON								0		
TOTAL	0	825	1,895	5,148	12,178	0	0	20,046		

Funding Source:	Local Sale	s Tax Fund						
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON					17,583			17,583
TOTAL	0	0	0	0	17,583	0	0	17,583

Funding Source:	Local Fund	I - SMCTA	Measure A					
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)		825						825
PS&E			1,745					1,745
R/W SUP (CT) *			150					150
CON SUP (CT) *								0
R/W				5,148	1,840			6,988
CON					10,292			10,292
TOTAL	0	825	1,895	5,148	12,132	0	0	20,000

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

		icias arc autor	,				Date:	11-Jan-07
County	CT District	PPN	0 *		EA*		Region/MF	O/TIP ID *
San Mateo	4	069	0A		235650		SM-0	10047
Project Title:	US-101/Willov	w Road Intercl	nange Recons	struction				
* NOTE: PPNO and EA a	ssigned by Caltrans.	Region/MPO/TIP	ID assigned by RT	PA/MPO				
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W	+							0
CON								0
TOTAL	0	0	0	0	0	0	0	0
TOTAL	U	U	U	U	U	U	U	U
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	1 1101	01700	00,00	00/10	10/11	11/12	12/10	10tai
PS&E	+							0
	1							~
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
TOTAL	U	U	U	U	U	U	U	0
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	1 1101	01700	00,00	00/10	10/11	11/12	12/10	10tai
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *	1							0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Additional Fundin								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13+	Total
E&P (PA&ED)	<u> </u>							0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W	1 1							0
CON	1							0
TOTAL	0	0	0	0	0	0	0	0

### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

### **Project Nomination Fact Sheet**

Nominating Agency: Valley Transportation Authority (VTA) Fact Sheet Date: 01/11/07								
Contact Person	ohn Ristow - Deputy Director, Programming & Project Development							
Phone Number	408.321.5713	Fax Number	408.321.5723					
Email Address	john.ristow@vta.org							

County	Caltrans District	PPNO *	EA*	Region/MPO/ TIP ID*		Route / Corridor *	Post Mile Back *	Post Mile Ahead *	
Santa Clara	4					101	48.97	52.17	
* NOTE: PPNO & EA as:	signed by Cal	trans. Region/MI	PO/TIP ID assign	ed by RTPA/MP	O. Route/Corr	idor & Post Mile Ba	ck/Ahead used for Stat	e Highway System.	
Legislative Districts	Senate:	11			Congression	nal: 14			
Legislative Districts	Assembly:	21							
Implementing Agency	PA&ED:	VTA			PS&E: VTA				
(by component)	R/W:	VTA			CON: VTA				
Project Title	US 101 A	uxiliary Lan	nes - San Mai	teo/Santa CI	ara Count	y Line to Rout	e 85 in Mountain	View	

Location - Project Limits - Description and Scope of Work (Provide a project location map on a separate sheet and attach to this form)
VTA proposes to add auxiliary lanes (one in each direction) along US-101 from Embarcadero Road to Route 85 in Santa Clara
County. (3.2 mile segment)

This project comlements the adjoining project in San Mateo County, adding auxiliary lanes between the Santa Clara/San Mateo County Line and Marsh Road, that has been submitted by Caltrans District 4 and San Mateo City and County Association of Governments (C/CAG).

#### Description of Major Project Benefits

Auxiliary lanes would improve traffic operations on the freeway by providing more room for traffic entering and exiting the freeway at each interchange to merge and weave and by allowing local traffic that is only going from one interchange to the next to use the freeway without impacting the main through lanes. By doing so, the proposed project will additionally result in delay and travel time benefits since it will increase freeway capacity.

Expected Source(s) of Additional Funding Necessary to Complete Project - as Identified Under 'Additional Need'

Project Delivery Milestones (month/year):								
Project Study Report (PSR) complete	Dec-06							
Notice of Preparation Document Type:	Jul-07							
Begin Circulation of Draft Environmental Document	Jun-08							
Final Approval of Environmental Document	July-09							
Completion of plans, specifications, and estimates	October-10							
Right-of-way certification	November-10							
Ready for advertisement	December-10							
Construction contract award	June-11							
Construction contract acceptance	August-13							

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan

(dollars in thousands and escalated)

Shaded fields are automatically calculated. Please do not fill these fields.

				<b>Date:</b> 11-Jan-07				
County	CT District	PPNO *	EA*	Region/MPO/TIP ID *				
Santa Clara	4	4 0 0 0						
Project Title:	Project Title: US 101 Auxiliary Lanes - San Mateo/Santa Clara County Line to Route 85 in Mountain View							

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	ject Cost							Project
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	0	3,534	0	0	0	0	0	3,534
PS&E	0	0	7,182	0	0	0	0	7,182
R/W SUP (CT) *	0	0	0	0	0	0	0	0
CON SUP (CT) *	0	0	0	0	0	0	0	0
R/W	0	0	0	6,612	0	0	0	6,612
CON	0	0	0	0	84,930	0	0	84,930
TOTAL	0	3,534	7,182	6,612	84,930	0	0	102,258

Corridor Manageme	ent Improvem	ent Account	(CMIA) Progi	am				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)		3,534						3,534
PS&E			7,182					7,182
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W				6,612				6,612
CON					74,930			74,930
TOTAL	0	3,534	7,182	6,612	74,930	0	0	92,258

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:	2008 State	2008 State Transportation Improvement Program - RIP - New (Santa Clara)						
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON					10,000			10,000
TOTAL	0	0	0	0	10,000	0	0	10,000

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

# BASIS OF PROJECT SCOPE, SCHEDULE, AND BENEFITS

# U.S. 101 CORRIDOR: AUXILIARY LANES FROM MARSH ROAD TO SANTA CLARA COUNTY LINE (INCLUDING WILLOW INTERCHANGE)

### Project Scope

- o The project scope was developed from the following document:
  - Project Study Report (Project Development Support), EA 04-235650, On Route 101, in San Mateo County, In the City of Menlo Park, At the Willow Road Interchange, approved 5-23-05.
  - Project Study Report, EA 04-235610, San Mateo 101 Auxiliary Lanes from Embarcadero Road in Santa Clara County to Marsh Road in San Mateo County, approved 9-29-04.

### Project Cost Estimate

O Costs used in this application are based on the documents mentioned above with costs updated and escalated to year of construction at 3.5% per year.

# Project Schedule

The schedule was developed based on the scope and anticipated durations for the activities to be completed. The environmental process has commenced for the Willow Interchange, and the Auxiliary Lane environmental process will start in early 2007. The design phase will combine these two projects in partnership with the San Mateo County Transportation Authority (SMCTA).

### Project Benefits:

- The project benefits are identified in the "Need and Purpose" section of scoping documents mentioned above.
- **Transportation 2030 Plan** for the San Francisco Bay Area FINAL February 2005 Appendix 1:

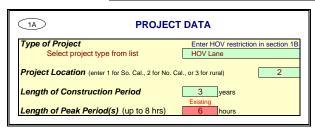
RTP (T2030) Project Description	Page	ID#
SM 101- US 101 norhtbound and southbound auxiliary lanes from Marsh Road to Santa Clara County line	104	21608
U.S. 101 Willow Road interchange reconstruction	103	21606

(Copies of these reports are available upon request. See Project Narrative for a detailed description of the project benefits)

### Project Contingency Funding

 All attempts will be made to keep the project cost within budget. This project is also funded with local sales tax measure funds and STIP (RIP). Cost increases, if any, will be covered through these fund sources.

District:	4	Project #	228
		EA:	235610
PROJECT:		PPNO:	658E
	US 101 Additional lanes from Marsh to Rte 85 - Marsh to Embarcadero Aux Lanes with Willow IC (SM)		



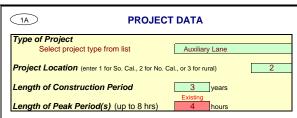
1B HIGHWAY DESIGN AND TRAFFIC DATA						
Highway Design	Existing	New				
Number of General Traffic Lanes	8	10				
Number of HOV Lanes	2	2				
HOV Restriction (2 or 3)	2	_				
, , , , , , , , , , , , , , , , , , , ,						
		1				
Highway Free-Flow Speed	65	65				
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35				
Length (in miles) Highway Segment	3.9	3.9				
Affected Area	3.9	3.9				
Average Daily Traffic						
Current	202,000					
	w/o Project	w/ Project				
Base (Year 1)	208,409	229,334				
Forecast (Year 20)	249,000	274,000				
Average Hourly HOV Traffic (if HOV lanes)						
Percent Traffic in Weave (if oper. improvement)						
Percent Trucks (include RVs, if applicable)	9.0%	9.0%				
Truck Speed (if passing lane project)						
On-Ramp Volume	Peak	Non-Peak				
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0				
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)						
-						
-						

1C HIGHWAY ACCIDENT DATA						
Actual 3-Year Accident Data for Facility						
	Count (No.)	Rate				
Fatal Accidents	3	0.00				
Injury Accidents	198	0.23				
Property Damage Only (PDO) Accidents	556	0.64				
Statewide Average for Highway Classification	n					
	Existing	New				
Accident Rate (per million vehicle-miles)	1.07	1.07				
Percent Fatal Accidents	0.4%	0.4%				
Percent Injury Accidents	25%	25%				

From Project Nomination Fa	ct Sheet:	
Fiscal Yea	r:	
Before		
2007-08	\$ -	
2008-09	\$ 11,280,000	
2009-10	\$ 11,280,000	
2010-11	\$ 11,280,000	
2011-12	\$ 45,120,000	
2012-13	\$ 45,120,000	
After	\$ 45,120,000	
TOTAL	\$ 169,200,000	
Escalation Factor	3.5%	

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project #	22b
		EA:	235610
PROJECT:	US 101 Additional lanes from Marsh to Rte 85 - County Line to Rte 85 Aux Lanes only	PPNO:	



Highway Design  Number of General Traffic Lanes  Number of HOV Lanes	8	
Number of HOV Lanes	0	10
	2	2
HOV Restriction (2 or 3)	2	
Highway Free-Flow Speed	65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	3.40	3.40
Affected Area	3.40	3.40
Base (Year 1) Forecast (Year 20) Average Hourly HOV Traffic (if HOV lanes) Percent Traffic in Weave (if oper. improvement) Percent Trucks (include RVs, if applicable)	224,636 292,000 2,000 25.0% 9.0%	224,636 292,000 2,000 20.0% 9.0%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.) Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		0

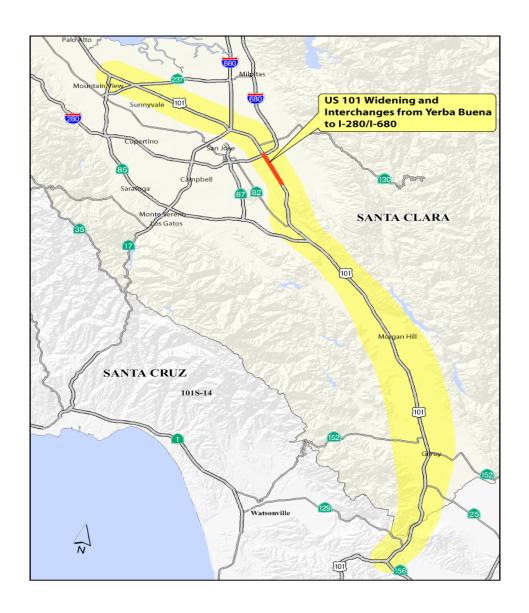
	Year Accident Data for Facility		
		Count (No.)	Rate
Fatal A	accidents	0	0.00
Injury /	Accidents	256	0.32
Proper	ty Damage Only (PDO) Accidents	898	1.13
0			
Statewide	e Average for Highway Classificat		
A	at Data (con a 200 a contrata a 200 a)	Existing	New
Accide	nt Rate (per million vehicle-miles)		

		-
From Project Nomination Fa	ict Sneet:	
Fiscal Yea	r:	
Before		
2007-08	\$ 3,534,000	
2008-09	\$ 7,182,000	
2009-10	\$ 6,612,000	
2010-11		
2011-12	\$ 42,465,000	
2012-13	\$ 42,465,000	
After		
TOTAL	\$ 102,258,000	
Escalation Factor	3.5%	

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

# **Project Location Map**

# US-101 Corridor: Widening and Interchanges from Yerba Buena to I-280/I-680



### CMIA PROJECT NARRATIVE

US 101 South Corridor in Santa Clara County:
Widening and Interchanges from Yerba Buena Road to I-280/I-680 (Evergreen)

## **Travel Corridor Description**

On a national and state level, US 101 is part of the Interregional Road System and the National Truck Network. It is a major north/south route along and near the coast between Los Angeles, at I-5, and the Pacific Northwest via the San Francisco Bay Area and is the backbone of the circulation system for many cities and communities in the region. US 101 is identified in the State's Interregional Transportation Strategic Plan as a "focus route", which assigns this freeway as requiring the highest priority for completion to the minimum facility standard in the 20-year planning period. It is also a Caltrans focus route according to the 1998 Interregional Transportation Strategic Plan. Regionally, the Metropolitan Transportation Commission (MTC) identifies US 101 as one of the four major "Interregional Corridors" within the Bay Area's transportation system.

The corridor functions as one of the region's most important freeways for moving goods and freight into and out of the region, serving statewide, national, and international markets. It accommodates a combination of concentrated urban needs as well as goods movement demands generated from San Benito, Monterey and other nearby counties. The corridor is a particularly important freight corridor for the movement of agricultural products. It is a commute route from southern Santa Clara County and San Benito County to the urbanized Santa Clara Valley including major employment centers in Silicon Valley. The traffic impacts of this junction are especially noticeable immediately to the south of US 101, towards Yerba Buena Road, as this is the primary travel route to southern Santa Clara and San Benito counties, with no alternates that can meet current travel demand. It is also a heavily traveled highway corridor for recreational travel providing access for the South Bay to the Sierras via SR 152, to Southern California via SR 152 and I-5, and to tourist destinations in the Monterey Bay Area.

The US 101 corridor within Santa Clara County traverses several major highways connecting the peninsula and east bay, including I-280/I-680, I-880, SR 237 and SR 85. It extends for 48.5 miles between SR 85 on the northern end and the Santa Clara/San Benito county line. Along this corridor lie the cities of Mountain View, Sunnyvale, Santa Clara, San Jose, Morgan Hill and Gilroy, and unincorporated areas toward the county line. The entire stretch is within Santa Clara County. Specific challenges faced with this corridor section include addressing lane discontinuity between the freeway and arterial interchanges, reconfiguring on/off ramps, providing consistent of HOV lane transitions. To address these issues, regional and state agencies have committed to program \$61 million for freeway improvement projects through sales tax measures and through HOT lane demand management.

# **Project Function**

The project will construct numerous operational and safety improvements along this 3.9 mile stretch of US 101, extending from the I-280/680 interchange to the north to the

Yerba Buena Road interchange to the south. An additional southbound lane will be constructed, interchanges at US 101/Tully Road and US1 101/Capitol Expressway will be reconstructed, and auxiliary lane extensions and collector-distributor roads will be built.

# **Project Benefits**

# A. Operations and Safety

The project is intended to address current congestion as well as the projected increase in peak travel demand. The project location is immediately south of the convergence of I-280, I-680 and US 101. As a result, significant peak period delays occur as traffic demand from three heavily traveled regional freeways funnel together. The current lane configuration does not provide sufficient capacity to handle existing peak demands and lane drops between ramps result in inefficient operation.

Commute patterns are directional with the majority of commuters traveling northbound during the AM and southbound during the PM. Northbound AM commuters experience 2,500 vehicle hours of delay between I-280 and north of Trimble road, thus making it the ninth most congested Bay Area highway location. In total, 7,600 vehicle hours of delay are experienced by all commuters within the corridor on a typical day. An 18-20% increase in peak travel demand has been forecasted in the project area within the next 20 years.

By reducing congestion, the project is also expected to reduce the potential for these accidents and improve the safety of those traveling in the corridor. In 2005, a total of 1,500 accidents were reported on weekdays, the majority of which occurred beginning at Blossom Hill Road and continuing through the northern corridor border. The vast majority of these accidents are rear-end collisions, which suggests that they are primarily the result of traffic congestion.

## B. Air Quality

The nine-county region is part of the San Francisco Bay Area Air Quality Basin. The region currently meets the national attainment standards for Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter ( $PM_{10}$ ), fine Particulate Matter ( $PM_{2.5}$ ), and lead. The area has been designated a marginal nonattainment area for Ozone based on current federal standards. Additionally, the region does not meet the current state standards for Ozone,  $PM_{10}$  and  $PM_{2.5}$ , but is in attainment for the other pollutants listed above. The projected reductions in daily vehicle hours of delay from this project will have a beneficial effect on air quality, as air pollutant emission reductions are realized from increased travel times and speeds. This project is included in the current RTP and in the air quality conformity analysis, and is therefore part of a conforming transportation plan.

### C. Access to Jobs, Housing, Markets, and Commerce

Some of the major traffic generators include: Silicon Valley, downtown San Jose, San Jose International Airport, San Jose State University, HP Pavilion at San Jose, Center for

Performing Arts, Children's Discovery Museum, Tech Museum of Innovation, Valley Fair Mall, Great Mall, Santana Row, and Gilroy Premium Shopping Outlet. Hence, travel demand along this corridor depends upon ongoing commuter use as well as event-based use. With an expected increase of housing stock beyond the southern end of the corridor (toward Gilroy), travel demand will further increase to and from between jobs and housing.

# **Project Risks**

The project is well positioned with regards to risk management in terms of cost, schedule, and anticipated benefits. The project has an approved Environmental Document and is ready to proceed to final design, greatly minimizing uncertainty with respect to project scope, schedule and cost. Moreover, no additional right of way is required, further minimizing cost, schedule and other project risks.

## **Corridor System Management Plan / Preserving Mobility Gains**

Caltrans District 4 and the Metropolitan Transportation Commission (MTC) have launched the region-wide Freeway Performance Initiative. The intent is to advance a corridor based and performance driven transportation planning process, employing tested System Management principles and strategies to maximize the efficiency of the existing transportation infrastructure. The US 101 South Corridor is one of the 12 "Key Corridors" identified for analysis and development of a Corridor System Management Plan over the next 18 months.

Over the past several years, VTA has adopted a corridor management approach to planning and project development. This has been manifested in critical corridor-wide studies that examine not just need and impact within the project limits, but the more comprehensive interactions throughout the corridor. These studies propose solutions that work to the benefit of the corridor as a whole. As part of the CMIA process, VTA is reviewing the effects and lessons learned through this process with the intent of developing this approach into a formal corridor management plan.

The US 101 South corridor from the northern junction with Route 85 in Mountain View to SR 129 in San Benito County is already relatively well-instrumented with TOS equipment. There are 31 ramp meters that are operational along this corridor, and 23 ramp meters that have been installed, but are inactive pending local agreement.

# **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

### **Project Nomination Fact Sheet**

Nominating Agency: Valley Transportation Authority (VTA) Fact Sheet Date: 01/11							
Contact Person	John Ristow - Deputy Director, Programming & Project Development						
Phone Number	(408) 321-5713	Fax Number	(408) 321-5723				
Email Address	John.Ristow@vta.org						

County	Caltrans District	PPNO *	EA*	Region/MPO/ TIP ID*		Route / Corridor *	Post Mile Back *	Post Mile Ahead *	
Santa Clara	4	TBD	1A9800			101	31	34.9	
* NOTE: PPNO & EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO. Route/Corridor & Post Mile Back/Ahead used for State Highway System.									
Legislative Districts	Senate:	13			Congressional: 16				
Ecgisiative Districts	Assembly: 28								
Implementing Agency	PA&ED:	Santa Clara V	alley TA (VTA)		PS&E: VT	·A			
(by component)	R/W:	VTA			CON: VTA				
Project Title	110 404 1	•/: .l !	.1 1	10	-11		-680 to Yerba Bu		

Location - Project Limits - Description and Scope of Work (Provide a project location map on a separate sheet and attach to this form)

On US 101 in the City of San Jose, Santa Clara County, extending from the I-280/I-680 interchange to the north to the Yerba

Buena interchange to the south. Construct operational and safety improvements as follows: Construct one additional lane in the

SB direction from south of Story Road interchange to south of the Capitol Expressway interchange; Modify the US 101/Tully Road
interchange to a partial cloverleaf interchange and rebuild the existing Tully Road overcrossing; Extend the existing southbound
auxiliary lane of US 101 between the Tully Road and Capitol Expressway interchanges; Modify the collector-distributor system on

NB US 101 btw Yerba Buena Road and Capitol Expressway and construct a new on-ramp from the C-D road to NB US 101 south
of Capitol Expressway overcrossing; Modify the SB off-ramp from US 101 to Yerba Buena Road to remove the C-D road btw
Capitol Expressway and Yerba Buena Road and widen the Yerba Buena off-ramp to two lanes.

#### Description of Major Project Benefits

- Reduce congestion at the I-280/I-680 and US 101 interchange, improving conditions on two major area routes
- Enhance operational safety along US 101 corridor
- Improve mobility by adding capacity on US 101
- Improve connectivity of Interregional System
- Improve ITS operations and overall corridor traffic flow through effective use of ramp metering
- Enhance movement of goods
- Improve traffic operations and minimized traffic delays along US 101
- Project can be phased- phase 1 would include southbound lane direction and Tully Road Interchange Improvement; Phase 2 would include modifications related to Capitol Expressway/Yerba Buena interchange

### Expected Source(s) of Additional Funding Necessary to Complete Project - as Identified Under 'Additional Need'

Project Study Report (PSR) complete	Jun-07
Notice of Preparation Document Type:	IS/ ND
Begin Circulation of Draft Environmental Document	Dec-05
Final Approval of Environmental Document	Jun-07
Completion of plans, specifications, and estimates	Sep-09
Right-of-way certfication	Sep-09
Ready for advertisement	Oct-09
Construction contract award	Mar-10
Construction contract acceptance	Dec-12

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hg/transprog/ and at: http://www.catc.ca.gov/

CMIA Guidelines

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan

(dollars in thousands and escalated)

Shaded fields are automatically calculated. Please do not fill these fields.

				<b>Date:</b> 11-Jan-07				
County	CT District	PPNO *	EA*	Region/MPO/TIP ID *				
Santa Clara	4	TBD	1A9800	0				
Project Title: US-101 Widening and Interchange/Operational Improvements (I-280/I-680 to Yerba Buena)								

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	ject Cost							Project
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	3,220	0	0	0	0	0	0	3,220
PS&E	0	9,500	0	0	0	0	0	9,500
R/W SUP (CT) *	0	0	0	0	0	0	0	0
CON SUP (CT) *	0	0	0	0	0	0	0	0
R/W	0	0	1,100	0	0	0	0	1,100
CON	0	0	0	90,400	0	0	0	90,400
TOTAL	3,220	9,500	1,100	90,400	0	0	0	104,220

Corridor Management Improvement Account (CMIA) Program								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W			600					600
CON				29,400				29,400
TOTAL	0	0	600	29,400	0	0	0	30,000

\* NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:	SAFETEA-	-LU						
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON				8,000				8,000
TOTAL	0	0	0	8,000	0	0	0	8,000

Funding Source:	Local							
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	3,220							3,220
PS&E		9,500						9,500
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W			500					500
CON				40,000				40,000
TOTAL	3,220	9,500	500	40,000	0	0	0	53,220

Funding Source:	2008 State	Transporta	ation Impro	vement Pro	gram - RIP	- New (Sai	nta Clara)	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON				13,000				13,000
TOTAL	0	0	0	13,000	0	0	0	13,000

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

							Date:	11-Jan-07
County	CT District	PPN			EA*		Region/MF	PO/TIP ID *
Santa Clara	4	TE			1A9800		(	)
Project Title:	US-101 Wide	ning and Inter	change/Opera	ational Improv	ements (I-280	/I-680 to Yerk	oa Buena)	
* NOTE: PPNO and EA a	ssigned by Caltrans.	Region/MPO/TIP	ID assigned by R	TPA/MPO				
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:							1	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:							1	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Additional Fundin	<del>-</del> ,				40/44	44/40	40/40	Tatal
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13+	Total
E&P (PA&ED)	+							0
PS&E	+							0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W	1							0
CON				0				0
TOTAL	0	0	0	0	0	0	0	0

# BASIS OF PROJECT SCOPE, SCHEDULE, AND BENEFITS

# U.S. 101 CORRIDOR: WIDENING AND INTERCHANGES FROM YERBA BUENA TO I-280/I-680 (EVERGREEN)

### Project Scope

- o The project scope was developed from the following document:
  - Draft Project Study Report/Project Report (PSR/PR) EA 04-1A9800, U.S. 101
     Operational Improvements from I-280/I-680 to Yerba Buena Road
  - Mitigated Negative Declaration, U.S. 101 Operational Improvements from I-280/I-680 to Yerba Buena Road, approved 12-01-05.

# Project Cost Estimate

O Costs used in this application are based on a PSR estimate prepared on April 2005 and escalated with 3.5% per year to mid-construction 2011 for construction capital cost. Other costs such as right of way have also been escalated appropriately.

### Project Schedule

o The schedule was developed based on the scope and anticipated durations for the activities to be completed. The environmental document needs to be federalized to utilize Federal earmarks and is being completed by the Santa Clara Valley Transportation Authority (VTA) with Caltrans oversight. The design phase is anticipated to be completed with Caltrans oversight also.

# Project Benefits:

 The project benefits are identified in the "Need and Purpose" section of scoping document mentioned above.

■ **Transportation 2030 Plan** for the San Francisco Bay Area – FINAL - February 2005 Appendix 1:

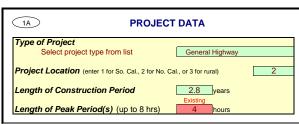
RTP (T2030) Project Description	Page	ID#
SCl 101 - US 101 Central Freeway Corridor Improvements (I-680/I-	U	
280 to Yerba Buena)	113	22996

(Copies of these reports are available upon request. See Project Narrative for a detailed description of the project benefits)

### Project Contingency Funding

 All attempts will be made to keep the project cost within budget. This project is also funded with local funds, federal earmarks, and STIP (RIP). Any cost increases will be covered through these fund sources.

District:	4	Project #	28
		EA:	1A980K
PROJECT:	US 101 Corridor: Widening and Interchanges from Yerba Buena to I-280/I-680	PPNO:	



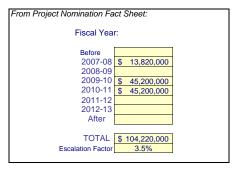
Highway Design	Existing	New
Number of General Traffic Lanes	8	10
Number of HOV Lanes	2	2
HOV Restriction (2 or 3)	2	
Highway Free-Flow Speed	65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	3.87	3.87
Affected Area	3.87	3.87
Current	234,000 w/o Project	w/ Project
Base (Year 1)	238,989	238,989
Forecast (Year 20)	272,846	272,846
Average Hourly HOV Traffic (if HOV lanes)	2,400	2,400
Percent Traffic in Weave (if oper. improvement)	00/	00/
Percent Trucks (include RVs, if applicable)	9%	9%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	900	397
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		
	1	1

Actual 3-Year Accident Data for Facility		
	Count (No.)	Rate
Fatal Accidents	3	0.00
Injury Accidents	230	0.23
Property Damage Only (PDO) Accidents	744	0.75
Statewide Average for Highway Classificat	tion	
Statewide Average for Highway Classificat	tion Existing	New
Statewide Average for Highway Classificat Accident Rate (per million vehicle-miles)		New 1.02
Statewide Average for Highway Classificat Accident Rate (per million vehicle-miles) Percent Fatal Accidents	Existing	

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

Prepare Model for Second Road

#### TOTAL CMIA PROJECT COSTS (in escalated dollars)

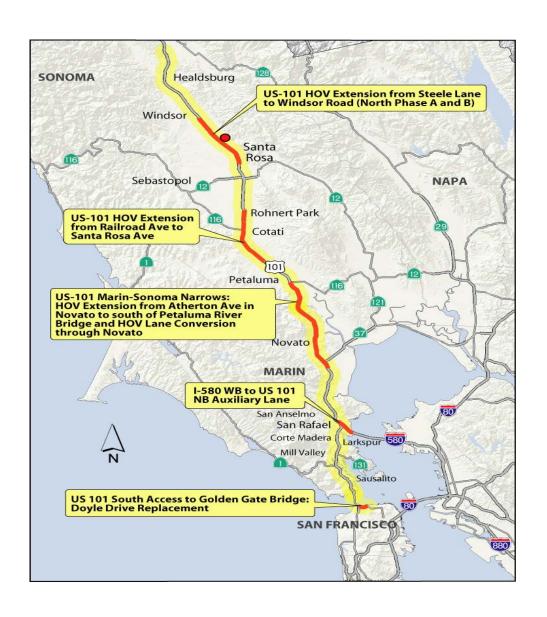


Weaving or TMS Safety Improvement set to 30% to reflect anticipated safety improvement

Model input speeds adjusted to reflect Traffic Ops Rpt. p.61 Year 1 peak period without project = 30 mph Year 20 peak period without project = 33.1 mph Year 1 peak period with project = 45 mph Year 20 peak period with project = 37 mph

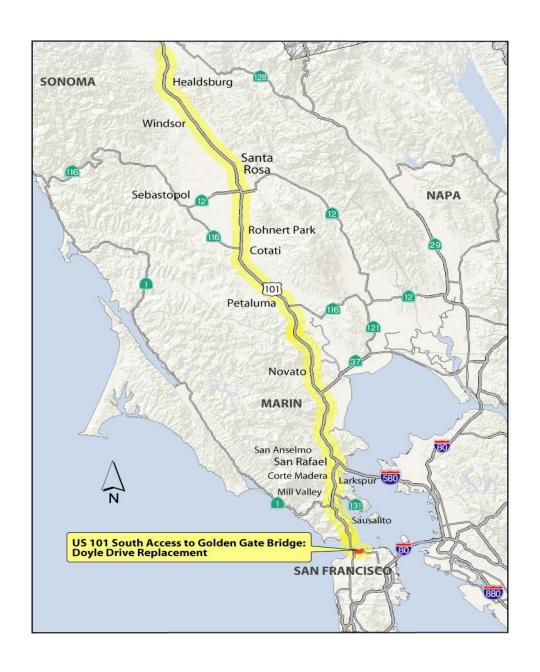
# Metropolitan Transportation Commission Corridor Mobility Improvement Account Program of Projects

# U.S. 101 Corridor: San Francisco/Marin/Sonoma



## **Project Location Map**

### South Access to Golden Gate Bridge: Doyle Drive Replacement



#### CMIA PROJECT NARRATIVE

US 101 North Corridor in San Francisco County: South Access to Golden Gate Bridge: Doyle Drive Replacement

#### **Travel Corridor Description**

US 101 is included in California's Freeway and Expressway System and is identified by the State as an Interregional Road System route. It is also identified in the State's Interregional Transportation Strategic Plan as a Focus Route. Focus Routes are specified as being of the highest priority for completion to the minimum facility standard in the 20-year planning period. US 101 is a major north-south route serving the state's coastal region between Los Angeles and the Pacific Northwest, and is comprised of mixed facilities (freeway, expressway and conventional). The US 101 North corridor extends between Doyle Drive in San Francisco, a 1.5 mile segment of US 101 connecting San Francisco with the Golden Gate Bridge, and the North Bay counties of Marin and Sonoma. The 84 mile facility carries up to 181,000 vehicles a day and is predominately freeway, except for a four-lane, seven-mile expressway portion that straddles the Marin/Sonoma County line. Major connections along the corridor include SR 131, SR 37, SR 116, SR 12 and SR 128. Additionally, extensive portions of US 101 in the North Bay, have no parallel arterials that can meaningfully serve as alternatives to the highway for vehicle trips. As such, US 101 is critical to both interregional and local distribution of goods between San Francisco and the North Bay, as well as recreational traffic destined for tourist attractions in Marin, Sonoma and Napa counties and other destinations along the North Coast.

There is no regional or local rail service in the quarter. Transit service is provided by the Golden Gate Bridge Transit District, which operates an extensive system of buses and ferry service between locations in Marin County and San Francisco. The ferry terminals are served by transit.

#### **Project Function**

It is proposed to construct a new roadway to replace the existing six-lane Doyle Drive portion of US 101 in order to improve the seismic, structural and traffic safety of the facility to ensure that connectivity is maintained between the North Bay and San Francisco. Doyle Drive is the 70-year-old stretch of US 101 that provides access for 89,000 daily vehicles to San Francisco, via the Golden Gate Bridge, from North Bay counties. Improvements to Doyle Drive must be context sensitive because it is situated in the Presidio of San Francisco, within the Golden Gate National Recreation Area. Due to a number of different factors, Doyle Drive requires extensive seismic, structural and traffic safety upgrades. Regular maintenance, seismic retrofit, and partial rehabilitation activities are keeping the structure safe in the short term. However, further structural degradation, caused by age and the effects of heavy traffic and exposure to salt air, will require, in the long term, permanent improvements to bring Doyle Drive up to current design and safety standards. Additionally, the eastern portion of the aging facility is located in a potential liquefaction zone identified on the State of California Seismic Hazard Zones map, dated August 2000.

#### **Project Benefits**

#### A. Operations and Safety

The Doyle Drive Replacement project would reduce the likelihood of a partial or complete failure of the existing facility, which would result in significant increases in delay for motorists traveling on Bay Area freeways. Traffic typically using Doyle Drive between the North Bay counties and San Francisco would be forced to use less direct alternate routes, such as I-580 across the Richmond-San Rafael Bridge and I-80 through Berkeley and across the San Francisco-Oakland Bay Bridge, significantly increasing their travel times. Unfortunately, these routes already experience substantial levels of congestion during peak periods and additional traffic loads from Doyle Drive would further increase delays for motorists who typically use them.

Currently, Doyle Drive has non-standard design elements including narrow lane widths, no fixed median barrier, no shoulders and substandard exit and entrance ramp geometry. The new facility would improve safety by increasing lane widths and dividing northbound and southbound traffic lanes with a wide median to alleviate head-on collisions. The project would also provide standard shoulders to allow disabled vehicles to be cleared from the travel lanes and redesign the Park Presidio interchange to allow for safer ingress and egress to and from Doyle Drive.

#### B. Air Quality

The nine-county region is part of the San Francisco Bay Area Air Quality Basin. The region currently meets the national attainment standards for Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter ( $PM_{10}$ ), fine Particulate Matter ( $PM_{2.5}$ ), and lead. The area has been designated a marginal nonattainment area for Ozone based on current federal standards. Additionally, the region does not meet the current state standards for Ozone,  $PM_{10}$  and  $PM_{2.5}$ , but is in attainment for the other pollutants listed above.

In February, 2005, the MTC adopted the 25-year Regional Transportation Plan (RTP). The transportation air quality conformity analysis of the Plan resulted in a positive conformity finding. This project is included in the current RTP and in the air quality conformity analysis, and is therefore part of a conforming transportation plan.

#### C. Access to Jobs, Housing, Markets, and Commerce

The inter-regional nature of the US 101 North corridor make Doyle Drive a vital link with respect to job commutes and delivery of goods and service between North Bay counties and San Francisco as well as other destinations on the Peninsula. Therefore, maintaining the operational integrity of this vital link is essential to the Bay Area economy. This facility lies within the Presidio National Park, a former military installation, which is now a regional jobs and recreation destination with an increasing supply of housing. The Doyle Drive Replacement project would provide direct access to the Presidio from US 101 and as well as access to jobs and housing in other parts of San Francisco.

#### **Project Risks**

Scope: The Golden Gate Bridge District is pursuing adding a ramp to the Bridge Outlook area, which could result in the project scope being altered.

Schedule: The political nature of the project, residing within a National Park, along with a local agency desire to designate this project as a Design Build project, may alter the schedule.

Cost: Considering the scope and schedule risks mentioned above, there may be an increase to the cost. The Environmental Mitigation list is on-going for the National Park Service is on-going, and mitigation beyond what is currently anticipated may be required. In addition, full funding is not yet secured and this project will require other funding sources besides CMIA.

#### Corridor System Management Plan / Preserving Mobility Gains

Caltrans District 4 and the Metropolitan Transportation Commission have recently launched a joint effort entitled the Freeway Performance Initiative. The intent of this effort is to advance a corridor-based and performance-driven Transportation Planning process, employing tested System Management principles and strategies to maximize the efficiency of the existing transportation infrastructure.

As part of the Doyle Drive Replacement project, Traffic Operations Systems (TOS) elements such as Closed Circuit Television cameras, Changeable Message Signs and vehicle detection stations would be installed. These elements would provide traffic monitoring, motorist information, incident management and a communications infrastructure allowing for an information linkage with other SMART Corridor projects already underway in San Francisco.

#### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

#### **Project Nomination Fact Sheet**

Nominating Agenc	y: San Francisco County Transportation Auth	ority	Fact Sheet Date:	01/16/07
Contact Person	Leroy Saage			
Phone Number	415.522.4812; 714.536.6240 Direct	Fax Number	415.522.4829	
Email Address	Lee@Saage.net			

County	Caltrans District  PPNO * EA * Region/MI				PO/ TIP ID*	Route / Corridor *	Post Mile Back *	Post Mile Ahead *
San Francisco	4	0619A	163700	SF-99	91030	101 / 1	8.0 (US-101) 6.8 (SR-1)	9.8 (US-101) 7.1 (SR-1)
Legislative Districts	Senate:	03, 08			Congression	onal: 8, 12		
Logislative Dietricts	Assembly:	12, 13						
Implementing Agency	PA&ED:	SFCTA			PS&E: SFCTA			
(by component)	R/W:	SFCTA			CON: Caltrans			
Project Title	119-101 9	South Acces	e to Golden	Gata Bridge	- Doyle D	rive Replaceme	ant	

Location - Project Limits - Description and Scope of Work (Provide a project location map on a separate sheet and attach to this form)

In the City and County of San Francisco, on Doyle Drive near Golden Gate Bridge from Merchant Road, just south of the Golden Gate Bridge Toll Plaza, to the intersections of Richardson Avenue and Francisco Street, and Marina Boulevard and Lyon Street-Construct a new roadway to replace the existing six-lane Doyle Drive portion of Route 101 to meet the current seismic, structural, and safety standards and operational needs. Provide access to the Presidio of San Francisco.

#### Description of Major Project Benefits

Doyle Drive provides access to the only direct connection between San Francisco and Marin Counties. Originally built in 1936, Doyle Drive is approaching the end of its useful life. The project would improve the seismic, structural, and traffic safety of this section of Route 1, as well as alleviate existing and projected congestion along this corridor. The project would also provide context-sensitive improvements for the Presidio, located within the Golden Gate National Recreation Area.

Expected Source(s) of Additional Funding Necessary to Complete Project - as Identified Under 'Additional Need'

Project Delivery Milestones (month/year):						
Project Study Report (PSR) complete	1993					
Notice of Preparation Document Type:	EIR/EIS					
Begin Circulation of Draft Environmental Document	Dec-05					
Final Approval of Environmental Document	May-07					
Completion of plans, specifications, and estimates	Dec-09					
Right-of-way certfication	Apr-10					
Ready for advertisement	May-10					
Construction contract award	Aug-10					
Construction contract acceptance	Dec-14					

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

## CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan

(dollars in thousands and escalated)

Shaded fields are automatically calculated. Please do not fill these fields.

				Date:	16-Jan-07
County	CT District	PPNO *	EA*	Region/MP	O/TIP ID *
San Francisco	4	0619A	163700	SF-99	1030
Project Title:	US-101 South	h Access to Golden Gate Br	ridge - Doyle Drive Replacement		

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	ject Cost							Project
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	23,855	0	0	0	0	0	0	23,855
PS&E	0	12,194	18,569	0	0	0	0	30,763
R/W SUP (CT) *	0	4,000	0	0	0	0	0	4,000
CON SUP (CT) *	0	0	0	5,000	26,375	10,000	0	41,375
R/W	0	0	35,973	0	0	0	0	35,973
CON	0	0	0	0	674,034	0	0	674,034
TOTAL	23,855	16,194	54,542	5,000	700,409	10,000	0	810,000

Corridor Manageme	ent Improvem	nent Account	(CMIA) Progr	ram				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	1							0
PS&E		3,625	10,000					13,625
R/W SUP (CT) *	1	4,000						4,000
CON SUP (CT) *					6,375			6,375
R/W	1							0
CON					151,000			151,000
TOTAL	0	7,625	10,000	0	157,375	0	0	175,000

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:	Traffic Con	gestion Re	lief Progran	n (State)				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	9,000							9,000
PS&E		3,000	3,000					6,000
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	9,000	3,000	3,000	0	0	0	0	15,000

<b>Funding Source:</b>	PLH Funds	(Federal)						
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	8,192							8,192
PS&E		625	625					1,250
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	8,192	625	625	0	0	0	0	9,442

Funding Source:	High Priorit	y (Federal)						
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	5,600							5,600
PS&E		475	475					950
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W			7,450					7,450
CON								0
TOTAL	5,600	475	7,925	0	0	0	0	14,000

TOTAL

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated)

	Shaded		omatically calc			se fields.			
							Date:	16-Jan-07	
County	CT District	PPI	NO *		EA*		Region/MP	O/TIP ID *	
San Francisco	4	06 <sup>-</sup>	19A	163700			SF-991030		
Project Title:	US-101 Sout	h Access to G	olden Gate Br	dge - Doyle Drive Replacement					
* NOTE: PPNO and EA as									
Funding Source:	State Tran	sportation I	mprovemer	nt Program	- RIP - Exis	ting			
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total	
E&P (PA&ED)								0	
PS&E		2,500	2,500					5,000	
R/W SUP (CT) *		_,,,,,	_,,,,,					0	
CON SUP (CT) *								0	
R/W			12,101					12,101	
CON			12,101					0	
TOTAL	0	2,500	14,601	0	0	0	0	17,101	
TOTAL	U	2,500	14,001	U	U	U	U	17,101	
Funding Source:	Prop K Sa	ales Tax Me	easure (Loca	al)					
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total	
E&P (PA&ED)	1,063							1,063	
PS&E	1,000	1,969	1,969					3,938	
R/W SUP (CT) *	1	.,550	.,550					0,000	
CON SUP (CT) *	1			5,000		10,000		15,000	
R/W				0,000		10,000		0	
CON					79,727			79,727	
TOTAL	1,063	1,969	1,969	5,000	79,727	10,000	0	99,728	
101712	1,000	1,000	1,000	0,000	10,121	10,000	Ü	00,120	
Funding Source:	State Tran	sportation I	mprovemer	nt Program	- RIP - New	(San Frai	ncisco)		
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total	
E&P (PA&ED)								0	
PS&E								0	
R/W SUP (CT) *								0	
CON SUP (CT) *					20,000			20,000	
R/W					-,			0	
CON					34,000			34,000	
TOTAL	0	0	0	0	54,000	0	0	54,000	
1017.2					3 1,000			3.,555	
Funding Source:	SHOPP - N	New							
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total	
E&P (PA&ED)	1						1 11	0	
PS&E	1							0	
R/W SUP (CT) *	1							0	
CON SUP (CT) *	1							0	
R/W								0	
CON					375,000			375,000	
TOTAL	0	0	0	0	375,000	0	0	375,000	
. 51712			0		0.0,000		V	0.0,000	
Funding Source:	Future Fed	deral/Other	Local Fund	S					
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13+	Total	
E&P (PA&ED)								0	
PS&E								0	
R/W SUP (CT) *								0	
CON SUP (CT) *								0	
R/W			16,422					16,422	
CON	1		,		34,307			34,307	
TOTAL	0	0	16 422	0	34 307	0	0	50.720	

Shaded fields are automatically calculated. Please do not fill these fields.

## BASIS OF PROJECT SCOPE, SCHEDULE, AND BENEFITS SF 101 – SOUTH ACCESS TO GOLDEN GATE BRIDGE: DOYLE DRIVE REPLACEMENT

#### Project Scope

- o The project scope was developed from the following document:
  - Draft Project Report, EA 04-163700, South Access to Golden Gate Bridge, Doyle Drive Replacement, approved 1-13-06.
  - Draft Environmental Impact Statement/Report, EA 04-163700, South Access to Golden Gate Bridge, Doyle Drive, approved 12-22-05.

#### Project Cost Estimate

 Costs used in this application are based on the documents mentioned above. The costs have been updated with the latest information, including savings through value analysis, and escalated to year of construction.

#### Project Schedule

The schedule was developed based on the scope and anticipated durations for the activities to be completed. The Preferred Alternative has been selected and a Record of Decision is expected in mid-2007. In partnership with the San Francisco County Transportation Authority (SFCTA), a risk design process is being developed prior to the Final EIR/EIS. The SFCTA is also investigating a design-build process as an alternative; however, the normal design process will commence regardless.

#### Project Benefits:

- The project benefits are identified in the "Need and Purpose" section of scoping documents mentioned above.
- **Transportation 2030 Plan** for the San Francisco Bay Area FINAL February 2005 Appendix 1.

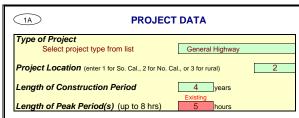
RTP (T2030) Project Description	Page	ID#
SF 101 – Reconstruct South Access to the Golden Gate Bridge: Doyle Drive to Broderick St	80	94089

(Copies of these reports are available upon request. See Project Narrative for a detailed description of the project benefits)

#### Project Contingency Funding

 All attempts will be made to keep the project cost within budget. This project is also funded with local sales tax measure funds, SAFTEA-LU, ISTEA Demo, TCRP, and STIP (RIP). Cost increases, if any, will be covered through local sales tax measure funds or STIP (RIP).

EA:	13
PROJECT: South Access to Golden Gate Bridge: Doyle Drive Replacement PPNO:	163700



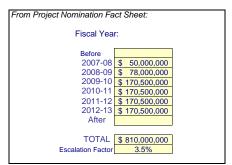
Highway Design	Existing	New
Number of General Traffic Lanes	6	7
Number of HOV Lanes		
HOV Restriction (2 or 3)		
Highway Free-Flow Speed	45	45
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	1.2	1.2
Affected Area	1.2	1.2
Average Daily Traffic  Current	83,149 w/o Project	w/ Project
Base (Year 1)	87,074	87,074
Forecast (Year 20)	105,716	105,716
Average Hourly HOV Traffic (if HOV lanes)		
Percent Traffic in Weave (if oper. improvement)		
Percent Trucks (include RVs, if applicable)	9%	9%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	460	174
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		

16 HIGHWAY ACCIDENT DATA								
Actual 3-Year Accident Data for Facility								
	Count (No.)	Rate						
Fatal Accidents	1	0.01						
Injury Accidents	41	0.38						
Property Damage Only (PDO) Accidents	157	1.44						
Statewide Average for Highway Classification	n							
	Existing	New						
Accident Rate (per million vehicle-miles)	0.98	0.98						
Percent Fatal Accidents	0.6%	0.6%						
Percent Injury Accidents	26.0%	26.0%						

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

Prepare Model for Second Road

#### TOTAL CMIA PROJECT COSTS (in escalated dollars)

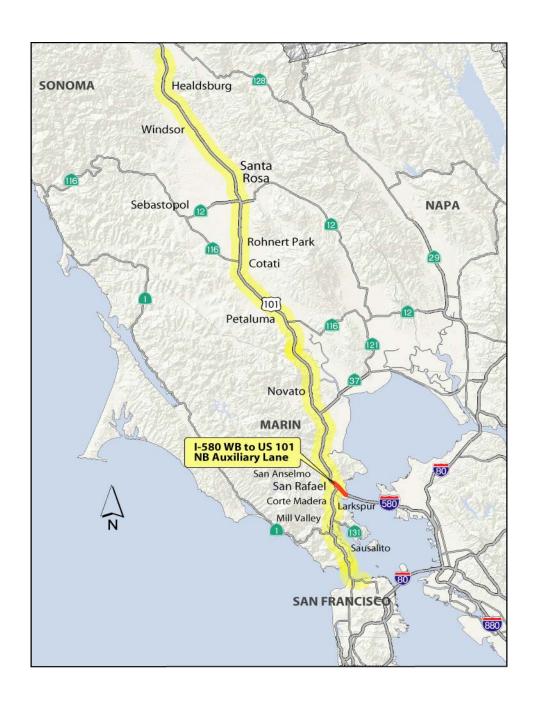


Weaving or TMS Safety Improvement set to 30% to reflect anticipated improvement

Default capacity reduced to 1,000 (arterial).

## **Project Location Map**

### **US-101/I-580 Greenbrae Corridor Complex**



#### CMIA PROJECT NARRATIVE

#### MARIN- US 101/580 Interchange in San Rafael

#### **Travel Corridor Description**

The US 101 North corridor extends 84-miles through the North Bay counties of Marin and Sonoma and is the principal north-south route in the coastal northwest between the San Francisco Bay Area and the State of Oregon. The US 101 Corridor is a lifeline for Northern California commuters and commerce, connecting San Francisco and the East Bay with Marin County and the rapidly growing Sonoma and Mendocino Counties. US 101 is included in California's Freeway and Expressway System and is identified by the State as both an Interregional Road System Route and Focus Route. US 101 supports the movement of goods and services between the Bay Area and the North Bay counties and provides residents and visitors with access to jobs, housing, parks and recreation, tourism and shopping.

The corridor facility is predominantly a six-lane freeway except for a four-lane, seven-mile expressway portion that straddles the Marin-Sonoma County line known as "the Narrows". Transit is provided by the Golden Gate Bridge, Highway Transit District (GGBHTD), which operates, bus and ferry service along the corridor. There is no regional or local rail service in the corridor. There are existing High Occupancy Vehicle (HOV) lanes in Marin County as far north as SR 37, and further north in Sonoma County near urbanized Santa Rosa however, the coverage is intermittent and there are several gaps in the HOV network. Along extensive portions of US 101 in the North Bay, there are no parallel arterials that can meaningfully serve as alternatives to the highway for vehicle trips. As such, US 101 is critical to the local distribution of goods and services throughout major portions of the North Bay.

#### **Project Function**

The proposed project will widen the westbound I-580 to northbound US 101 connector from one to two lanes. This project will also add an auxiliary lane on westbound I-580 leading to the Bellum Boulevard off-ramp and will reconstruct the Bellum overcrossing to address on-and off-ramp deficiencies leading to Bellum Boulevard.

#### **Project Benefits**

#### A. Operations and Safety

The US 101/580 Interchange project will improve traffic operations in the City of San Rafael by providing a two-lane connector to northbound US 101 from westbound I-580 and an auxiliary lane on I-580 leading to the Bellam Boulevard off-ramp. Regular backups occur on the existing single-lane connector, which is the primary access from the East Bay (via the Richmond-San Rafael Bridge) into Marin County.

#### B. Air Quality

Marin and Sonoma Counties are part of the San Francisco Bay Area Air Quality Basin. The Region currently meets the National attainment standards for Carbon Monoxide,

Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter (PM<sub>10</sub>), fine Particulate Matter (PM<sub>2.5</sub>), and lead however, does not meet the current State standards for Ozone, PM<sub>10</sub> and PM<sub>2.5</sub>. The projected reductions in daily vehicle hours of delay from this project will have a beneficial effect on air quality. As motorist travel times and speeds increase, significant reductions in air pollutant emissions will be attained.

In February 2005, the Metropolitan Transportation Commission (MTC) adopted the 25-year Regional Transportation Plan (RTP). The transportation air quality conformity analysis of the Plan resulted in a positive conformity finding. This project is included in the current RTP and in the air quality conformity analysis, and is therefore part of a conforming transportation plan.

#### C. Access to Jobs, Housing, Markets, and Commerce

US 101 is the primary transportation corridor serving employment, residential areas and commerce through the North Bay Area and is the only north-south transportation corridor through Sonoma County. The US 101/I-580 interchange acts as the primary entry point for travel between the East Bay and the North Bay Over the last 15 years, significant commercial, residential and tourism growth, have led to significant traffic increases along the corridor on weekdays as well as weekends..

As a commute corridor, US 101 is the main access route from Sonoma County to the many employment destinations in Marin and San Francisco Counties, the broader Peninsula and Silicon Valley. Much of the projected growth is expected to occur in Sonoma County. Within Sonoma County, an addition of approximately 10,000 new jobs between 2003 and 2015 is projected. Sonoma County jobs are expected to increase from the 2005 level of 224,270 to 321,000 jobs in 2030. The proposed project will add a connector lane and auxiliary lane thereby improving access to US 101 to address the growing needs of the Marin, Sonoma and Northern county businesses and major employers.

US 101 provides access to major recreational and tourist destinations within Marin and Sonoma Counties and beyond. Sonoma County has become a major tourist destination due to its growing wine industry. In addition to typical weekday congestion, weekend congestion continues to grow due to tourism and recreational trips to the Golden Gate National Recreational Area (GGNRA), Marin Headlands, Muir Woods, the Russian River, North Coast beaches, and Sonoma County wineries. The proposed project will support the growing tourist industry of the North Bay by providing congestion relief and reduced travel time to both recreational and tourist destinations.

The 101 Corridor is the primary regional link to California's north coastal area and the Oregon border serving as a significant goods movement corridor for Marin and Sonoma Counties. Trucks constitute 7% of the traffic volume within the corridor. Congestion during the peak periods significantly delays the on-time delivery of goods and services. This project will provide increased capacity in the mixed-use lanes, thereby facilitating improved truck traffic flow and the movement of goods. Improved reliability of goods

movement along the corridor will promote economic growth, sustain existing businesses and attract new investors to the North Bay.

#### **Project Risks**

A Project Study Report will be prepared for the project. Risks to scope, schedule and cost will be assessed at that time.

#### **Corridor System Management Plan / Preserving Mobility Gains**

Caltrans District 4 and the Metropolitan Transportation Commission have recently launched a joint effort entitled the Freeway Performance Initiative. The intent of this effort is to advance a corridor based and performance driven transportation planning process, employing tested system management principles and strategies to maximize the efficiency of the existing transportation infrastructure. Corridor stakeholders have been identified and a consultant team has been selected to begin a detailed performance assessment. Preliminary analysis and recommended strategies are anticipated by Summer 2007. Additionally, the Transportation Authority of Marin (TAM) and the Sonoma County Transportation Authority (SCTA), in collaboration with the Mendocino Council of Governments have developed a draft Corridor System Management Plan that describes the history of corridor investments as well as identifies future needs to support the areas projected economic growth.

#### **APPENDIX A**

#### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

#### **Project Nomination Fact Sheet**

Nominating Age	ncy: Transportation Authority of Marin (TAM)		Fact Sheet Date:	01/11/07
Contact Person	Dianne Steinhauser			
Phone Number	(415) 507-2680	Fax Number	(415) 507-2648	
Email Address	dsteinhauser@tam.ca.gov			

Project Information				T		T	
County	Caltrans District	PPNO *	EA *	Region/MPO/ TIP ID*	Route / Corridor *	Post Mile Back *	Post Mile Ahead
Marin	4			MRN050001	580/101	3.3/9.9	4.8/11.1
NOTE: PPNO & EA ass	signed by Cal	trans. Region/MI	PO/TIP ID assiç	ned by RTPA/MPO. Route/Cor	ridor & Post Mile Ba	ck/Ahead used for Stat	te Highway System.
egislative Districts	Senate:	3		Congression	onal: 6		
	Assembly:	6					
mplementing Agency	PA&ED:	TAM		PS&E:	ТАМ		
by component)	R/W:	TAM		CON:	ТАМ		
Project Title	US-101/I-	-580 Intercha	ange: West	bound I-580 to Northbo	ound US-101 A	uxiliary Lane	
ocation - Project Lim	its - Descri	ntion and Scor	ne of Work (F	rovide a project location map	on a senarate she	et and attach to this t	form)
-		•	•	to US 101; and on US 1	•		•
				et) off-ramp. <b>Scope of \</b>			
				m westbound Rte 580 to			
				Blvd. Undercrossing st			
on Bellam Blvd; and	d add auxil	iary lane on r	northbound	JS 101.			-
Description of Major F	Project Bene	r.,					
		etits					
	•		operations	on the westbound Rte 5	80 connector to	US 101 and relie	f traffic queues
Proposed improvem	nents will ir	mprove traffic		on the westbound Rte 5 to enhancing traffic ope			
Proposed improvent westbound Rte 580	nents will in . The impi	mprove traffic rovements wi	ill contribute		rations and imp	roving travel times	s within two high
Proposed improvent westbound Rte 580	nents will in . The impi	mprove traffic rovements wi	ill contribute	to enhancing traffic ope	rations and imp	roving travel times	s within two high
Proposed improvent westbound Rte 580	nents will in . The impi	mprove traffic rovements wi	ill contribute	to enhancing traffic ope	rations and imp	roving travel times	s within two high
Proposed improvent westbound Rte 580	nents will in . The impi	mprove traffic rovements wi	ill contribute	to enhancing traffic ope	rations and imp	roving travel times	s within two high
Proposed improven westbound Rte 580	nents will in . The impi	mprove traffic rovements wi	ill contribute	to enhancing traffic ope	rations and imp	roving travel times	s within two high
Proposed improven westbound Rte 580	nents will in . The impi	mprove traffic rovements wi	ill contribute	to enhancing traffic ope	rations and imp	roving travel times	s within two high
Proposed improven westbound Rte 580	nents will in . The impi	mprove traffic rovements wi	ill contribute	to enhancing traffic ope	rations and imp	roving travel times	s within two high
Proposed improven westbound Rte 580 congestion corridors	nents will ir . The impr s - US 101	mprove traffic rovements w and Rte 580	ill contribute ); improve bi	to enhancing traffic ope	rations and imp acilities; enhand	roving travel times ce mobility; and in	s within two high
Proposed improven westbound Rte 580 congestion corridors	nents will ir . The impr s - US 101	mprove traffic rovements w and Rte 580	ill contribute ); improve bi	to enhancing traffic ope cycles and pedestrians f	rations and imp acilities; enhand	roving travel times ce mobility; and in	s within two high
Proposed improven westbound Rte 580 congestion corridors	nents will ir . The impr s - US 101	mprove traffic rovements w and Rte 580	ill contribute ); improve bi	to enhancing traffic ope cycles and pedestrians f	rations and imp acilities; enhand	roving travel times ce mobility; and in	s within two high
Proposed improven westbound Rte 580 congestion corridors	nents will ir . The impr s - US 101	mprove traffic rovements w and Rte 580	ill contribute ); improve bi	to enhancing traffic ope cycles and pedestrians f	rations and imp acilities; enhand	roving travel times ce mobility; and in	s within two high
Proposed improvem westbound Rte 580 congestion corridors	nents will ir . The impi s - US 101	mprove traffic rovements wi and Rte 580 Funding Nece	ill contribute ); improve bi	to enhancing traffic ope cycles and pedestrians f	rations and imp acilities; enhand	roving travel times ce mobility; and in	s within two high
Proposed improvem westbound Rte 580 congestion corridors	nents will ir . The impi s - US 101	mprove traffic rovements wi and Rte 580 Funding Nece	ill contribute ); improve bi	to enhancing traffic ope cycles and pedestrians t plete Project - as Identified	rations and imp acilities; enhand	roving travel times ce mobility; and in	s within two high
Proposed improvem westbound Rte 580 congestion corridors  Expected Source(s) of Project Delivery Miles	nents will in The impos S - US 101	mprove traffic rovements wi and Rte 580 Funding Nece	ill contribute b; improve bi	to enhancing traffic ope cycles and pedestrians t plete Project - as Identified	rations and imp acilities; enhand	roving travel times ce mobility; and in	s within two high
Project Delivery Miles Project Study Report (P	The imples - US 101  Additional  Additional	mprove traffic rovements wi and Rte 580 Funding Nece	essary to Com	to enhancing traffic ope cycles and pedestrians f plete Project - as Identified	rations and imp acilities; enhand	roving travel times ce mobility; and in	s within two high
Proposed improvem westbound Rte 580 congestion corridors  Expected Source(s) of Project Delivery Miles  Project Study Report (Project Study Report of Preparation Regin Circulation of Dragon Proposed Project Study Report (Project Study Report of Preparation Regin Circulation of Dragon Proposed Regin Circulation of Dragon Proposed Regin Circulation of Dragon Proposed Regin Circulation of Dragon Proposed Regin Circulation of Dragon Proposed Regin Circulation of Dragon Proposed Regin Circulation of Dragon Proposed Regin Circulation of Dragon Proposed Regin Circulation of Dragon Proposed Regin Circulation of Dragon Proposed Regin Circulation of Dragon Proposed Regin Circulation of Dragon Proposed Regin Circulation of Dragon Proposed Regin Circulation of Dragon Proposed Regin Propo	tones (mont SR) completed	mprove traffice rovements with and Rte 580  Funding Nece th/year):  te Type: CE or IS/ental Document	essary to Com  Ap  EA NA  Jur	to enhancing traffic ope cycles and pedestrians f plete Project - as Identified ril-07	rations and imp acilities; enhand	roving travel times ce mobility; and in	s within two high
Proposed improvem westbound Rte 580 congestion corridors  Expected Source(s) of Project Delivery Miles  Project Study Report (Project Study Report of Preparation Segin Circulation of Dra	tones (mont SR) completed	mprove traffice rovements with and Rte 580  Funding Nece th/year):  te Type: CE or IS/ental Document	SSARY to Com  Apple A NA Jury Jary	to enhancing traffic opecycles and pedestrians for the pedestrians	rations and imp acilities; enhand	roving travel times ce mobility; and in	s within two high
Proposed improvem westbound Rte 580 congestion corridors  Expected Source(s) of Project Delivery Miles  Project Study Report (Project Study Report (Project Of Preparation Gegin Circulation of Draffinal Approval of Environment (Proposed Proposed (Project Study Report (Project Study Repo	tones (moniss) Additional  tones (moniss) Complete Document	mprove traffic rovements with and Rte 580 median section with the section	SSARY to Com  Apple A NA Jury Jary	to enhancing traffic ope cycles and pedestrians f plete Project - as Identified ril-07	rations and imp acilities; enhand	roving travel times ce mobility; and in	s within two high
Proposed improvem westbound Rte 580 congestion corridors  Expected Source(s) of Project Delivery Miles  Project Study Report (Project Study Report (Project Study Report (Project Of Preparation Gegin Circulation of Drase)  Final Approval of Environce Completion of plans, sp	tones (montos)  Additional  tones (montos)  SR) completocument occumental Documental Documental Documental Documents, and contos occurrents.	mprove traffic rovements with and Rte 580 median section with the section	Apper Apper	to enhancing traffic opecycles and pedestrians for the pedestrians	rations and imp acilities; enhand	roving travel times ce mobility; and in	s within two high
Proposed improven westbound Rte 580 congestion corridors	Additional  Additional  Tones (month)  SR) completed  Document  If Environmental Documental Documental Document	mprove traffic rovements with and Rte 580 median section with the section	Apperson App	plete Project - as Identified ril-07 ne-07 nuary-08	rations and imp acilities; enhand	roving travel times ce mobility; and in	s within two high
Proposed improvem westbound Rte 580 congestion corridors  Expected Source(s) of Project Delivery Miles  Project Study Report (Project  tones (montal series)  Additional  Additional  Tones (montal series)  Tones (montal series)  Tones (montal series)  Tones (montal series)  Tones (montal series)  Tones (montal series)  Tones (montal series)  Tones (montal series)	mprove traffic rovements with and Rte 580 median section with the section	Apper Apper	to enhancing traffic opecycles and pedestrians to p	rations and imp acilities; enhand	roving travel times ce mobility; and in	s within two high	

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

#### CORRIDOR MOBILITY IMPROVEMENT ACCOUNT **Project Nomination Fact Sheet - Project Cost and Funding Plan**

(dollars in thousands and escalated)
Shaded fields are automatically calculated. Please do not fill these fields.

				Date:	11-Jan-07
County	CT District	PPNO *	EA*	Region/MP0	D/TIP ID *
Marin	4	0	0	MRN05	0001
Project Title:	US-101/I-580	Interchange: Westbound I-	580 to Northbound US-101 Auxiliary Lane	<del>)</del>	

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	ject Cost							Project
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	0	1,300	0	0	0	0	0	1,300
PS&E	0	2,480	420	0	0	0	0	2,900
R/W SUP (CT) *	0	40	10	0	0	0	0	50
CON SUP (CT) *	0	0	0	2,100	0	0	0	2,100
R/W	0	0	450	0	0	0	0	450
CON	0	0	0	13,200	0	0	0	13,200
TOTAL	0	3,820	880	15,300	0	0	0	20,000

Corridor Manageme	ent Improvem	ent Account	(CMIA) Progi	am				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)		2,100						2,100
PS&E		1,680	420					2,100
R/W SUP (CT) *		40	10					50
CON SUP (CT) *				2,100				2,100
R/W			450					450
CON				13,200				13,200
TOTAL	0	3,820	880	15,300	0	0	0	20,000

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

		noids are auto	,				Date:	11-Jan-07
County	CT District	PPI	1O *		EA*		Region/MI	PO/TIP ID *
Marin	4	(	4		0			050001
Project Title:		Interchange:			ound US-101	Auxiliary Lan	е	
* NOTE: PPNO and EA as	signed by Caltrans.	Region/MPO/TIP	ID assigned by R	PA/MPO				
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:	Dria.	07/00	00/00	00/40	10/11	44/40	40/40	Tetal
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:								1
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	FIIOI	07/06	06/09	09/10	10/11	11/12	12/13	10tai
PS&E								
								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	12.					,		0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
		0	0	0				
TOTAL	0	0	0	0	0	0	0	0
Additional Funding	Needs (fund	ling needs no	ot yet commit	ted)				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13+	Total
E&P (PA&ED)				_				0
PS&È								0
R/W SUP (CT) *								0
CON SUP (CT) *	1							0
ICON SUP ICTI								
R/W CON								0

## BASIS OF PROJECT SCOPE, COST, SCHEDULE, AND BENEFITS WESTBOUND 580 TO NORTHBOUND US 101 CONNECTOR IMPROVEMENTS

#### Project Sponsor:

o The Transportation Authority of Marin, TAM, is designated as the project sponsor.

#### Project Scope

- o The scope of this project, to widen the connector from Westbound Interstate 580 to Northbound Highway 101, was included in the FEIS / FEIR approved December, 1999 for the Marin 101 HOV Lane Gap Closure Project. It was included in the approved February 2000 Project Report for the Marin 101 Gap Closure. The connector widening was not included in the fundable element of the Marin 101 Gap Closure due to lack of funds to build it at the time.
- The project scope includes the following elements.
  - Add auxiliary lane on I-580 before the Bellam Blvd off-ramp from one half mile east of Bellam Blvd
  - Widen from one to two lanes the on-ramp connector to northbound US 101 from westbound I-580
  - Reconstruct existing I-580 Bellam Blvd Undercrossing structure to allow connector widening; improve safety for bicyclists and pedestrians at Bellam Blvd Undercrossing
  - Modify on-ramp from westbound I-580 to Bellam Blvd and from Bellam Blvd to westbound I-580
  - Continue the two lane I-580 to US 101 connector as a second auxiliary lane to the next interchange, the Central San Rafael off-ramp on northbound US 101.

#### Project Cost Estimate

- o The project estimate was developed based on the following factors:
  - Construction Cost Estimate and Support Costs are in 2006 dollars and have been updated to reflect current costs.
  - Construction Cost Estimate includes 25% contingency
  - Construction cost is escalated @ 3.5% to mid construction.
  - Construction period is from 2009 to 2010
  - Construction Engineering and Management Costs are 16% of the Construction Capital Cost Estimate
  - Construction Engineering and Management Costs are escalated at 3.5% per year to 2009

#### Project Schedule

- o The project schedule is based on the project having been included in the previously approved Final Environmental Impact Statement/Report of the Marin 101 HOV Lane Gap Closure project. The project will begin construction at the time the Gap Closure HOV Lane is opened on Highway 101, thereby addressing the substantial congestion that will remain on I-580 when the HOV lane on Highway 101 is opened.
- O The schedule assumes environmental work in the form of an Environmental Reevaluation/ Addendum of Modifications to the Final Environmental Impact Statement/ Report. Caltrans supports this course of action. There are no affected resources in the project area nor is any additional right of way required; all right of way is in public ownership. The schedule assumes approximately six months for environmental clearance, one year for design activities, six months for processing the project for advertisement, and

approximately 18 months to construct. The project has received concurrence from the local jurisdiction, the City of San Rafael. The planned project schedule is as follows:

PAED	PS&E	ADVERTISE	BEGIN CONSTRUCTION	END CONSTRUCTION
January 2008	July 2008	Jan 2009	March 2009	September 2010

#### Project Benefits:

The proposed project will improve traffic operations on westbound I-580 connector to Northbound US 101 while relieving substantial traffic queues on Westbound I-580 in Marin County. The improvements will reduce travel times, enhance mobility and improve air quality. Less congestion often results in improved safety by reducing rear-end type accidents.

(See Project Narrative for a detailed description of the project benefits)

#### Project Funding

- O The overall Marin 101 HOV Lane Gap Closure project of which this connector is an element has \$180 million currently invested in its completion. This includes over \$50 million in regional federal Congestion Mitigation Air Quality, CMAQ, funds. It also includes \$25 million in Marin County Measure A Transportation Sales Tax funds, and \$5 million in federal earmark funds. CMIA funding being sought is complementary to the substantial local investment already made in the project.
- o The project has been escalated 3.5% annually to the midpoint of construction. Should the project cost increase, funding for the increase will be secured from future RTIP or local funding sources.

District:	4	Project #	17a
PROJECT:	US 101/I-580 Greenbrae Corridor Complex - Auxiliary lane	EA: PPNO:	

1A PROJEC	T DATA
Type of Project	
Select project type from list	Auxiliary Lane
Project Location (enter 1 for So. Cal., 2 for No.	Cal., or 3 for rural)
Length of Construction Period	1.5 years
	Existing
Length of Peak Period(s) (up to 8 hrs)	4 hours

1B HIGHWAY DESIGN AND TRAFFIC DATA				
Highway Design	Existing	New		
Number of General Traffic Lanes	4	5		
Number of HOV Lanes	1	1		
HOV Restriction (2 or 3)	2			
Highway Free-Flow Speed	65	65		
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35		
Length (in miles) Highway Segment	0.6	0.6		
Affected Area	1.0	1.0		
Average Daily Traffic (one-way if aux. lane or off-ra	85,000 w/o Project	w/ Project		
Base (Year 1)	87,195	87,195		
Forecast (Year 20)	115,000	115,000		
Average Hourly HOV Traffic (if HOV lanes)	900	900		
Percent Traffic in Weave (if oper. improvement) Percent Trucks (include RVs, if applicable)	38.0% 9%	41.0% 9%		
Truck Speed (if passing lane project)	970	976		
Truck Speed (ii passing lane project)				
On-Ramp Volume	Peak	Non-Peak		
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	1350	595		
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)				

1C HIGHWAY ACCIDENT DATA				
Actual 3-Year Accident Data for Facility				
	Count (No.)	Rate		
Fatal Accidents	0	0.00		
Injury Accidents	15	0.27		
Property Damage Only (PDO) Accidents	39	0.70		
Statewide Average for Highway Classifica	tion			
	Existing	New		
Accident Rate (per million vehicle-miles)	0.80	0.80		
Percent Fatal Accidents	1%	1%		
Percent Injury Accidents	36%	36%		

TOTAL CMIA PROJECT COSTS (in escalated dollars)

om Project Nomination Fact Sheet:				
Fiscal Yea	r:			
Before				
2007-08	\$ 382,000			
2008-09	\$ 88,000			
2009-10	\$ 1,530,000			
2010-11				
2011-12				
2012-13				
After				
TOTAL	\$ 2,000,000			
Escalation Factor				

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

Prepare Model for Second Road

District:	4	Project #	17b
	·	EA:	
PROJECT:	US 101/I-580 Greenbrae Corridor Complex - 580 WB to 101 NB Connector	PPNO:	

1A PROJECT DATA			
Type of Project			
Select project type from list	Freeway Connector		
Project Location (enter 1 for So. Cal., 2 for No.	Cal., or 3 for rural)		
Length of Construction Period	1.5 years		
Length of Peak Period(s) (up to 8 hrs)	Existing 4 hours		

Highway Design	Existing	New
Number of General Traffic Lanes	1	2
Number of HOV Lanes		
HOV Restriction (2 or 3)		
Highway Free-Flow Speed	60	60
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	0.6	0.6
Affected Area	1.0	1.0
Average Della Traffic		
Average Daily Traffic  Current	42.212	
Current	w/o Project	w/ Project
Base (Year 1)	42,592	42,592
Forecast (Year 20)	47,406	47,406
Average Hourly HOV Traffic (if HOV lanes)	.,,	11,100
Percent Traffic in Weave (if oper. improvement)	38.0%	41.0%
Percent Trucks (include RVs, if applicable)	9%	9%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak 0	Non-Peak 0
Hourly Ramp Volume (if aux. lane/on-ramp proj.) Metering Strategy (1, 2, 3, or D, if on-ramp proj.)	U	U
Metering Strategy (1, 2, 3, or D, ir on-ramp proj.)		

1C HIGHWAY ACCIDENT DATA					
Actual 3-Year Accident Data for Facility					
	Count (No.)	Rate			
Fatal Accidents	0	0.00			
Injury Accidents	15	0.54			
Property Damage Only (PDO) Accidents	39	1.41			
Statewide Average for Highway Classificat	ion				
	Existing	New			
Accident Rate (per million vehicle-miles)	0.80	0.80			
Percent Fatal Accidents	1%	1%			
Percent Injury Accidents	36%	36%			

-	

#### TOTAL CMIA PROJECT COSTS (in escalated dollars)

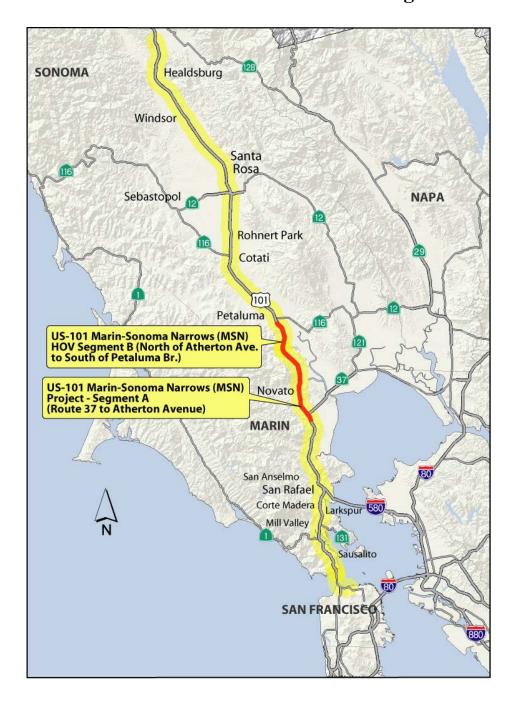
From Project Nomination Fa	act Sheet:
Fiscal Year	r:
Before 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 After	\$ 3,438,000 \$ 792,000 \$ 13,770,000
TOTAL Escalation Factor	\$ 18,000,000 3.5%

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

Prepare Model for Second Road

### **Project Location Map**

US-101 Marin-Sonoma Narrows: HOV Lanes Extension from Atherton Avenue to South of the Petaluma River Bridge



#### **CMIA PROJECT NARRATIVE**

MARIN/SONOMA- US 101- Marin-Sonoma Narrows: Segment A-State Route 37 to Atherton Avenue in Novato Segment B-Atherton Avenue in Novato to State Route 116 in Petaluma

#### **Travel Corridor Description**

The US 101 – North corridor extends 84 miles through the North Bay counties of Marin and Sonoma and is the principal north-south route in the coastal northwest between the San Francisco Bay Area and the State of Oregon. This Corridor is a lifeline for Northern California commuters and commerce, connecting San Francisco and the East Bay with Marin County and rapidly growing Sonoma and Mendocino Counties. US 101 is included in California's Freeway and Expressway System and is identified by the State as both an Interregional Road System Route and Focus Route. US 101 supports the movement of goods and services between the Bay Area and the Northern States and provides residents and visitors with access to jobs, housing, parks and recreation, tourism and shopping.

The facility is predominantly a six-lane freeway except for a four-lane, 7-mile expressway portion that straddles the Marin-Sonoma County line known as "the Narrows". Transit is provided by the Golden Gate Bridge, Highway Transit District, which operates, bus and ferry service along the corridor. Along extensive portions of US 101 in the North Bay, there are no parallel arterials that can meaningfully serve as alternatives to the highway making this route critical to the movement of goods and services throughout the North Bay.

High Occupancy Vehicle (HOV) lanes have been in operation in Marin County since the mid-1980's, and currently operate in segments from Mill Valley to Larkspur and from San Rafael to Novato. The HOV lane gap between Larkspur and San Rafael is being closed with the construction of a new HOV segment which is expected to be completed by 2008. In Sonoma County, a short HOV lane segment has been in operation since 2002 in the southern part of Santa Rosa.

#### **Project Function**

The project proposed under this CMIA application would extend the HOV lanes from their existing northerly terminus at SR 37 in Novato an additional 13 miles to the north, ending just south of the junction with SR 116 in Petaluma. In addition, the project will upgrade the existing expressway portion of US 101 through the 7-mile "Narrows" section to full freeway standards. This expansion is part of the overall plan for the US 101 corridor to provide congestion relief by implementing continuous HOV lanes from north of Santa Rosa to the southern part of Marin County.

The proposal consists of two primary elements: The Narrows Segment A will add about 4 miles of HOV lanes in each direction from SR- 37 in southern Novato to Atherton Avenue in northern Novato. Segment B will add about 9 miles of HOV lanes from Atherton Avenue to just south of SR-116 in Petaluma. These projects are part of the three-segment Marin-Sonoma Narrows project (Segments A, B and C). Segment A will

adjoin the HOV lanes existing south of the project limits and connect to the HOV lanes proposed to the north for Segment B, resulting in a comprehensive HOV system in Marin and southern Sonoma County extending over 20 miles.

#### **Project Benefits**

#### A. Operations and Safety

The Marin-Sonoma Corridor is the second most congested in the Bay Area. Within the limits of Narrows Segments A and B, US 101 experiences an annual average daily traffic (AADT) volume of approximately 128,000 vehicles, 7% of which are trucks. The Narrows is the primary bottleneck for southbound traffic during the AM peak period and for northbound traffic during the PM peak period.

The Narrows Segments A and B project will encourage HOV use and improve mainline traffic operations. The addition of HOV lanes will increase the person-throughput of the facility by adding capacity, allowing eligible vehicles to bypass congestion and helping close existing HOV gaps. As a result, congestion will decrease and non-HOVs will also benefit. The completed projects will promote alternative transportation by offering substantial time savings to carpoolers and transit riders and will add traffic management capabilities to enable incident monitoring and traffic monitoring controls. These upgrades will significantly improve access to and enhance safety on the US 101 corridor.

Safety and operations will also be enhanced by upgrading the existing four-lane expressway to a freeway in Segment B. Upgrades provided by this project include new interchanges and frontage roads through the Narrows section, eliminating left turn lanes in the median, closing of over 80 direct private driveway accesses onto 101, and improve entrances and exits from the highway allowing drivers to safely accelerate and decelerate at on-and off-ramps.

#### B. Air Quality

Marin and Sonoma Counties are part of the San Francisco Bay Area Air Quality Basin. The Region currently meets the National attainment standards for Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter (PM<sub>10</sub>), fine Particulate Matter (PM<sub>2.5</sub>), and lead however, does not meet the current State standards for Ozone, PM<sub>10</sub> and PM<sub>2.5</sub>. The projected reductions in daily vehicle hours of delay from this project will have a beneficial effect on air quality. As motorist travel times and speeds increase, significant reductions in air pollutant emissions will be attained.

#### C. Access to Jobs, Housing, Markets, and Commerce

US 101 is the primary transportation corridor serving employment, residential areas and commerce through the North Bay Area and is the only north-south transportation corridor through Sonoma County. Over the last 15 years, significant commercial, residential and tourism growth, have led to significant traffic increases along the corridor on weekdays as well as weekends.

As a commute corridor, US 101 is the main access route from Sonoma County to the many employment destinations in Marin and San Francisco Counties, the broader Peninsula and Silicon Valley. Much of the projected growth is expected to occur in Sonoma County. Within Sonoma County, approximately 10,000 new jobs are projected between 2003 and 2015. The Narrows Project will add capacity in the form of HOV lanes, thereby significantly addressing the growing needs of the Marin, Sonoma and Northern county businesses and major employers.

#### **Project Risks**

The Marin-Sonoma Narrows HOV lane extension project has undergone nearly 10 years of project evaluation and environmental studies. In March 2007, the Draft Environmental Impact Statement /Report will be released for final public review and comment. Risks to cost, schedule and scope involve the need for timely review and approval of the environmental document and mitigation requirements by resource agencies, as well as issuance of permits. Other risks include right-of-way acquisition, utilities relocation, design changes due to new information, and geotechnical investigations or risk design before environmental approval. Execution of pertinent agreements and construction market volatility are additional risks. The capital cost estimate assumes a 3.5% per year escalation.

#### **Corridor System Management Plan / Preserving Mobility Gains**

Caltrans District 4 and the Metropolitan Transportation Commission have recently launched a joint effort entitled the Freeway Performance Initiative. The intent of this effort is to advance a corridor based and performance driven transportation planning process, employing tested system management principles and strategies to maximize the efficiency of the existing transportation infrastructure. Corridor stakeholders have been identified and a consultant team has been selected to begin a detailed performance assessment. Preliminary analysis and recommended strategies are anticipated by Summer 2007. Additionally, the Transportation Authority of Marin (TAM) and the Sonoma County Transportation Authority (SCTA), in collaboration with the Mendocino Council of Governments have developed a draft Corridor System Management Plan that describes the history of corridor investments as well as identifies future needs to support the areas projected economic growth.

The Narrows Segments A and B projects will enhance existing devices and install new elements where gaps in ITS coverage exist. TOS elements will enable system management of corridor investments by facilitating improved incident management, congestion management and dissemination of motorist information by transmitting information to the Caltrans Traffic Management Center. In Marin County, existing investments in TOS equipment have been deployed at freeway junctions and major interchanges where there is recurrent congestion. Some of these elements include closed-circuit televisions (CCTV) cameras, changeable message signs (CMS), extinguishable message signs (EMS), Highway Advisory Radio (HAR) and Traffic Monitoring Stations. This project proposes to implement ramp metering at designated ramp locations. As future projects are programmed, there will be opportunities to install more TOS equipment in the corridor.

#### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

#### **Project Nomination Fact Sheet**

Nominating Agenc	y: Transportation Authority of Marin		Fact Sheet Date:	01/12/07
Contact Person	Dianne Steinhauser			
Phone Number	(415) 507-2714	Fax Number	(415) 507-2648	
Email Address	dsteinhauser@tam.ca.gov			

County	Caltrans District	PPNO *	EA*	Region/MPO/ TIP ID*		)*	Route / Corridor *	Post Mile Back *	Post Mile Ahead *		
Marin	4	A0360F	264000	MRN050034			101	MRN: R18.3	MRN: 22.4		
* NOTE: PPNO & EA as:	signed by Cal	trans. Region/M	PO/TIP ID assign	ned by RTPA/MP	O. Route/C	orridor 8	& Post Mile Bad	ck/Ahead used for Stat	e Highway System.		
Legislative Districts Senate: 3					Congressional: 6						
Logiciativo Districto	Assembly:	6									
Implementing Agency	PA&ED:	Caltrans			PS&E:	Caltra	ins				
(by component)	R/W:		CON: Caltrans								
	US 101 C	Convert HO	/ Lanes in No	ovato - Marin	-Sonom	na Nar	rows Segm	ent A			
Project Title	(Dauta 2	7 1	- NI ( A	therton Aver			_				

Location - Project Limits - Description and Scope of Work (Provide a project location map on a separate sheet and attach to this form)

In Marin and Sonoma Counties, the Marin-Sonoma Narrows (MSN) Project extends 17 miles between SR-37 in Novato and Old Redwood Highway in Petaluma along a rural, largely undeveloped corridor. The project name derives from a narrowing of the existing facility from six to four lanes between north side of Novato and the south side of Petaluma. The MSN project area is divided into three segments: A, B, and C. Segment A is from SR-37 to Atherton Avenue in Novato. Segment B is from Atherton Avenue to north of SR-116 (East) in Petaluma. Segment C is from north of SR-116 (East) to Old Redwood Highway in Petaluma.

The proposed CMIA scope includes converting about 4 miles of existing mixed flow lanes to HOV lanes and adding auxiliary lanes between Route 37 junction and Delong Avenue.

#### Description of Major Project Benefits

This CMIA project provides a phased extension of the HOV lanes system in Marin County, improves operations and facilitates continuity with other potential HOV projects in Sonoma County.

Route 101 is the primary transportation corridor serving employment, commerce, and residential area of North Bay and is the only north-south corridor through Marin and Sonoma Counties. It also serves as the primary regional link to California's north coastal area and the Oregon border.

The MSN project upgrades to freeway the remaining expressway section on the corridor to improve the safety and operations and provides additional HOV lanes and capacity to reduce congestion, encourage carpooling and transit, and accommodate future growths of truck traffic, goods movement, and expanding economy.

Expected Source(s) of Additional Funding Necessary to Complete Project - as Identified Under 'Additional Need'

Project Delivery Milestones (month/year):	
Project Study Report (PSR) complete	Jan-99
Notice of Preparation Document Type: EIR/EIS	
Begin Circulation of Draft Environmental Document	Mar-07
Final Approval of Environmental Document	Jul-08
Completion of plans, specifications, and estimates	Dec-09 (Assume risk design)
Right-of-way certification	Feb-09
Ready for advertisement	Apr-09
Construction contract award	Aug-09
Construction contract acceptance	Aug-11

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

## CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan

(dollars in thousands and escalated)

Shaded fields are automatically calculated. Please do not fill these fields.

				Date:	12-Jan-07
County	CT District	PPNO *	EA*	Region/MI	PO/TIP ID *
Marin	4	A0360F	264000	MRNO	050034
Project Title:	US 101 Conv	ert HOV Lanes in Novato -	Marin-Sonoma Narrows Segment A		

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	ject Cost							Project
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	0	500	0	0	0	0	0	500
PS&E	0	2,500	0	0	0	0	0	2,500
R/W SUP (CT) *	0	300	0	0	0	0	0	300
CON SUP (CT) *	0	0	0	2,900	0	0	0	2,900
R/W	0	0	2,900	0	0	0	0	2,900
CON	0	0	0	20,900	0	0	0	20,900
TOTAL	0	3,300	2,900	23,800	0	0	0	30,000

Corridor Manageme	ent Improvem	ent Account	(CMIA) Progi	ram				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)		500						500
PS&E		2,500						2,500
R/W SUP (CT) *		300						300
CON SUP (CT) *				2,900				2,900
R/W			2,900					2,900
CON				20,900				20,900
TOTAL	0	3,300	2,900	23,800	0	0	0	30,000

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

		, , ,						
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

							Date:	12-Jan-07
County	CT District	PPN			EA*		Region/MF	
Marin	4	A03			264000		MRN0	50034
Project Title:	US 101 Conve				a Narrows Seg	gment A		
* NOTE: PPNO and EA as	ssigned by Caltrans.	Region/MPO/TIP	ID assigned by R1	PA/MPO				
Funding Source:		07/00	00/00	00/40	40/44	44/40	40/40	T-1-1
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *	1							0
R/W								0
CON	0	0		•				0
TOTAL	0	0	0	0	0	0	0	0
Funding Courses								1
Funding Source:	Prior	07/00	00/00	00/40	10/11	11/10	10/10	Total
Component	10119	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	1 1							0
PS&E	1 1							0
R/W SUP (CT) *	1							0
CON SUP (CT) *	1							0
R/W	1							0
CON	0	0		•				0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:								1
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	FIIOI	07/06	06/09	09/10	10/11	11/12	12/13	10tai 0
PS&E	+							0
R/W SUP (CT) *	+							0
CON SUP (CT) *	1							0
R/W	1							0
CON	1							0
TOTAL	0	0	0	0	0	0	0	0
TOTAL	U	U	U	U	U	U	U	U
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)		01,00	00.00	00,10			12,75	0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

							Date:	12-Jan-07
County	CT District	PPN	0 *		EA*		Region/MI	PO/TIP ID *
Marin	4	A036			264000			050034
Project Title:	US 101 Conv	ert HOV Lanes	s in Novato - N	/larin-Sonoma	a Narrows Seg	ment A		
* NOTE: PPNO and EA a	ssigned by Caltrans.	Region/MPO/TIP	D assigned by RT	PA/MPO				
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								C
CON								C
TOTAL	0	0	0	0	0	0	0	C
		-	-		•		-	
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								(
PS&E								(
R/W SUP (CT) *								C
CON SUP (CT) *								(
R/W								C
CON								C
TOTAL	0	0	0	0	0	0	0	C
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								C
PS&E								C
R/W SUP (CT) *								C
CON SUP (CT) *								C
R/W								C
CON								C
TOTAL	0	0	0	0	0	0	0	
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								C
PS&E								(
R/W SUP (CT) *								(
CON SUP (CT) *								C
R/W								(
CON								(
TOTAL	0	0	0	0	0	0	0	C
<b>Additional Fundin</b>	g Needs (fund	ing needs no	t yet committ		ARK (New)			
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13+	Total
E&P (PA&ED)								C
PS&E								C
R/W SUP (CT) *								C
CON SUP (CT) *								(
R/W								C
CON								C
TOTAL	0	0	0	0	0	0	0	C

#### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

#### **Project Nomination Fact Sheet**

Nominating Agen	cy: Transportation Authority of Marin		Fact Sheet Date:	01/11/07
Contact Person	Dianne Steinhauser			
Phone Number	(415) 507-2714	Fax Number	(415) 507-2648	
Email Address	dsteinhauser@tam.ca.gov			

County	Caltrans District	PPNO *	EA * Region/MP		PO/ TIP ID*	Route / Corridor *	Post Mile Back *	Post Mile Ahead *			
Marin/Sonoma	4	A0360F/ B0360F	264000	MRN050034	/SON010002	101	MRN: R18.3 SON: 0.0	MRN: 27.7 SON: 7.5			
* NOTE: PPNO & EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO. Route/Corridor & Post Mile Back/Ahead used for State Highway System.											
Legislative Districts	Senate:	3			Congressional: 6						
Legislative Districts	Assembly:	Assembly: 6									
Implementing Agency	PA&ED:	Caltrans			PS&E: Caltrans						
(by component)	nponent) R/W: Caltrans		CON: Caltrans								
Project Title	US-101 I	Marin-Sono	ma Narrows	<b>HOV Segme</b>	nt B (North	of Atherton	Ave. to South of	Petaluma Br.)			

Location - Project Limits - Description and Scope of Work (Provide a project location map on a separate sheet and attach to this form)

In Marin and Sonoma Counties, the Marin-Sonoma Narrows (MSN) Project extends 17 miles between SR-37 in Novato and Old Redwood Highway in Petaluma along a rural, largely undeveloped corridor. The project name derives from a narrowing of the existing facility from six to four lanes between north side of Novato and the south side of Petaluma. The MSN project area is divided into three segments: A, B, and C. Segment A is from SR-37 to Atherton Avenue in Novato. Segment B is from Atherton Avenue to north of SR-116 (East) in Petaluma. Segment C is from north of SR-116 (East) to Old Redwood Highway in Petaluma.

The proposed CMIA scope for Segment B extends about 7 miles from north of Atherton Avenue to south of Petaluma Bridge to upgrade the existing 4-lane expressway to the 6-lane freeway for HOV and construct new interchanges, frontage roads, and pedestrian/bicycle facilities.

#### Description of Major Project Benefits

Route 101 is the primary transportation corridor serving employment, commerce, and residential area of North Bay and is the only north-south corridor through Marin and Sonoma Counties. It also serves as the primary regional link to California's north coastal area and the Oregon border.

The MSN project upgrades to freeway the remaining expressway section on the corridor to improve the safety and operations and provides additional HOV lanes and capacity to reduce congestion, encourage carpooling and transit, and accommodate future growths of truck traffic, goods movement, and expanding economy.

#### Expected Source(s) of Additional Funding Necessary to Complete Project - as Identified Under 'Additional Need'

Marin is committing \$35 million in new RTIP funding and Sonoma is committing \$17 million in new RTIP funding to the Marin-Sonoma Narrows Segment B (North of Atherton Avenue to South of Petaluma Bridge) project.

The Transportation Authority of Marin, TAM, along with the Sonoma County Transportation Authority, SCTA, have worked cooperatively in the past with our Congressional representatives, particularly Congresswoman Lynn Woolsey and Senator Barbara Boxer to secure a substantial high priority project earmark in SAFETEA-LU for the Marin Sonoma Narrows, as well as annual appropriations to support ongoing development of the project. In consultation with Congresswoman Lynn Woolsey's office, TAM and SCTA are confident that federal earmark funding similar to previous commitment levels can be secured in the future for the successful completion of the Narrows. TAM and SCTA will continue to coordinate this need through our Congressional representatives.

Project Delivery Milestones (month/year):						
Project Study Report (PSR) complete	Jan-99					
Notice of Preparation Document Type: EIR/EIS						
Begin Circulation of Draft Environmental Document	Mar-07					
Final Approval of Environmental Document	Jul-08					
Completion of plans, specifications, and estimates	Jul-10					
Right-of-way certification	Jul-11					
Ready for advertisement	Sep-11					
Construction contract award	Dec-11					
Construction contract acceptance	Dec-14					

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

## CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan

(dollars in thousands and escalated)

Shaded fields are automatically calculated. Please do not fill these fields.

				Date:	11-Jan-07
County	CT District	PPNO *	EA*	Region/MF	PO/TIP ID *
Marin/Sonoma	4	A0360F/ B0360F	264000	MRN050034	/SON010002
Project Title:	US-101 Marir	n-Sonoma Narrows HOV Se	egment B (North of Atherton Ave. to South	of Petaluma	Br.)

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	Proposed Total Project Cost							Project
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	21,500	0	0	0	0	0	0	21,500
PS&E	0	5,650	15,750	0	0	0	0	21,400
R/W SUP (CT) *	0	0	3,700	0	0	0	0	3,700
CON SUP (CT) *	0	0	0	0	0	33,300	0	33,300
R/W	0	0	0	0	47,200	0	0	47,200
CON	0	0	0	0	0	221,900	0	221,900
TOTAL	21,500	5,650	19,450	0	47,200	255,200	0	349,000

Corridor Manageme	ent Improvem	ent Account	(CMIA) Progi	ram				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E			3,000					3,000
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W					30,892			30,892
CON						106,108		106,108
TOTAL	0	0	3,000	0	30,892	106,108	0	140,000

\* NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:	RTIP - Exi	sting \$2.2 N	1 Marin and	1 \$2.2 M Sc	noma			
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E			4,400					4,400
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	4,400	0	0	0	0	4,400

Funding Source:	ITIP - IIP							
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	12,800							12,800
PS&E			1,400					1,400
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W					2,400			2,400
CON								0
TOTAL	12,800	0	1,400	0	2,400	0	0	16,600

Funding Source:	DEMO - TE	EA21						
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	3,100							3,100
PS&E		5,650						5,650
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	3,100	5,650	0	0	0	0	0	8,750

## CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated)

	Shaded f	fields are auto	matically calc	ulated. Please	do not fill thes	se fields.		
							Date:	11-Jan-07
County	CT District	PPN	IO *		EA*		Region/MP	O/TIP ID *
Marin/Sonoma	4	A0360F/			264000		MRN050034/	/SON010002
Project Title:	US-101 Marir	n-Sonoma Nar	rows HOV Se	gment B (Nor	th of Atherton .	Ave. to South	of Petaluma I	Br.)
* NOTE: PPNO and EA ass		Region/MPO/TIP	ID assigned by R	PA/MPO				
Funding Source:	TCRP						-	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	5,600							5,600
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	5,600	0	0	0	0	0	0	5,600
	MEAGUIDE	. 14 . 0						
Funding Source:		M - Sonon		00/10	40/44	44/40	40/40	T-/ 1
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W						7.000		0
CON	0	0	0	0	0	7,092	0	7,092
TOTAL	0	0	0	0	0	7,092	0	7,092
Funding Source:	SVEETEV	-LU HPP - N	/arin					
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	1 1101	07700	00/03	03/10	10/11	11/12	12/10	0
PS&E			5,116					5,116
R/W SUP (CT) *			3,700					3,700
CON SUP (CT) *			0,. 00					0,130
R/W					4,346			4,346
CON					.,0.0			0
TOTAL	0	0	8,816	0	4,346	0	0	13,162
	-	-	- /	-	,		-	-, -
Funding Source:	SAFETEA-	-LU HPP - S	Sonoma					1
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W					9,562			9,562
CON								0
TOTAL	0	0	0	0	9,562	0	0	9,562
			. , ,					
Funding Source:					oma (\$992k	•		
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E			1,834					1,834
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	1,834	0	0	0	0	1,834

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

County	00 erton Ave. to South 1 11/12 35,000 0 35,000	12/13	/SON010002 Br.)  Total  0 0 0 35,000 35,000 Total 0
Project Title: US-101 Marin-Sonoma Narrows HOV Segment B (North of Athermoly Note: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO  Funding Source: STIP-RIP - NEW - Marin  Component Prior 07/08 08/09 09/10 10/1  E&P (PA&ED)  PS&E  R/W SUP (CT) *  CON SUP (CT) *  R/W  CON  TOTAL 0 0 0 0 0  Funding Source: STIP-RIP - NEW - Sonoma  Component Prior 07/08 08/09 09/10 10/1  E&P (PA&ED)  Funding Source: STIP-RIP - NEW - Sonoma  Component Prior 07/08 08/09 09/10 10/1  E&P (PA&ED)  PS&E  R/W SUP (CT) *	1 11/12 35,000 0 35,000	12/13	Total  0 0 0 0 35,000 35,000 Total 0
*NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO  Funding Source: STIP-RIP - NEW - Marin  Component Prior 07/08 08/09 09/10 10/1  E&P (PA&ED)  PS&E  R/W SUP (CT) *  CON SUP (CT) *  R/W  CON  TOTAL 0 0 0 0 0   Funding Source: STIP-RIP - NEW - Sonoma  Component Prior 07/08 08/09 09/10 10/1  E&P (PA&ED)  PS&E  R/W SUP (CT) *  R/W CON  TOTAL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 11/12 35,000 0 35,000	12/13	Total 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Funding Source: STIP-RIP - NEW - Marin  Component Prior 07/08 08/09 09/10 10/1  E&P (PA&ED)  PS&E  R/W SUP (CT) *  CON SUP (CT) *  R/W  CON  TOTAL 0 0 0 0 0   Funding Source: STIP-RIP - NEW - Sonoma  Component Prior 07/08 08/09 09/10 10/1  E&P (PA&ED)  PS&E  R/W SUP (CT) *	35,000 0 35,000	0	0 0 0 0 35,000 35,000
Component	35,000 0 35,000	0	0 0 0 0 35,000 35,000
E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL 0 0 0 0   Funding Source: STIP-RIP - NEW - Sonoma Component Prior 07/08 08/09 09/10 10/1 E&P (PA&ED) PS&E R/W SUP (CT) *	35,000 0 35,000	0	0 0 0 0 35,000 35,000
PS&E	0 35,000	0	0 0 0 0 35,000 35,000
R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL 0 0 0 0   Funding Source: STIP-RIP - NEW - Sonoma Component Prior 07/08 08/09 09/10 10/1 E&P (PA&ED) PS&E R/W SUP (CT) *	0 35,000	0	0 0 0 35,000 35,000
CON SUP (CT) *  R/W  CON  TOTAL  0  0  0  0  Funding Source: STIP-RIP - NEW - Sonoma  Component Prior 07/08 08/09 09/10 10/1  E&P (PA&ED)  PS&E  R/W SUP (CT) *	0 35,000	0	0 0 35,000 35,000 Total
R/W	0 35,000	0	35,000 35,000 Total
CON TOTAL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 35,000	0	35,000 Total
TOTAL   0   0   0   0   0	0 35,000	0	35,000 Total
Funding Source:         STIP-RIP - NEW - Sonoma           Component         Prior         07/08         08/09         09/10         10/1           E&P (PA&ED)         PS&E         R/W SUP (CT) *         07/08         08/09         09/10         10/1	•		Total 0
Component         Prior         07/08         08/09         09/10         10/1           E&P (PA&ED)         PS&E         R/W SUP (CT) *         PS&E         PSW         PSW	1 11/12	12/13	0
Component         Prior         07/08         08/09         09/10         10/1           E&P (PA&ED)         PS&E         R/W SUP (CT) *         PS&E         PSW         PSW	1 11/12	12/13	0
E&P (PA&ED) PS&E R/W SUP (CT) *	1 11/12	12/13	0
PS&E R/W SUP (CT) *			
PS&E R/W SUP (CT) *			
			0
CON SUP (CT) *			0
			0
R/W			0
CON	17,000		17,000
TOTAL 0 0 0 0	0 17,000	0	17,000
Funding Source: STIP-IIP (New)			
Component Prior 07/08 08/09 09/10 10/1	1 11/12	12/13	Total
E&P (PA&ED)			0
PS&E			0
R/W SUP (CT) *			0
CON SUP (CT) *			0
R/W			0
CON	50,000		50,000
TOTAL 0 0 0 0	0 50,000	0	50,000
Funding Source: Future Federal Earmark / Other Local			
Component         Prior         07/08         08/09         09/10         10/1	1 11/12	12/13	Total
E&P (PA&ED)			0
PS&E			0
R/W SUP (CT) *			0
CON SUP (CT) *	33,300		33,300
R/W			0
CON	6,700		6,700
TOTAL 0 0 0 0	0 40,000	0	40,000
Additional Funding Needs (funding needs not yet committed) - EARMARK (New	w)		
Component         Prior         07/08         08/09         09/10         10/1	1 11/12	12/13+	Total
E&P (PA&ED)			0
PS&E			0
R/W SUP (CT) *			0
CON SUP (CT) *			0
R/W			0
CON			0
TOTAL 0 0 0 0	0 0	0	0
<u> </u>	-		

## BASIS OF PROJECT SCOPE, SCHEDULE, AND BENEFITS US 101 HOV LANES – NARROWS PHASE B

#### Project Scope

- The scope of this project was developed based on the January 1999 approved Project Study Report (On Route 101 from 1.5KM North of Atherton Avenue Overcrossing in Novato to the Route 101/116 Separation and Overhead in Petaluma) and August 2001 approved Project Study Report (On Route 101 between Route 116 East and Old Redwood Highway in Sonoma County). The project scope included the following elements.
  - Upgrade the existing 4-lane expressway to the 6-lane freeway for HOV from north of Atherton Avenue to south of Petaluma Bridge
  - Construct new interchanges, frontage roads, and pedestrian/bicycle facilities

#### Project Cost Estimate

- o This project is currently in the environmental phase. The project estimate was developed based on the following factors.
  - Construction Cost Estimate and Support Costs are in escalated dollars
  - Construction Cost Estimate includes 16% contingency
  - Construction Costs are escalated at 3.5% per year to the middle of the construction period (2013)
  - Construction Engineering and Management Costs are 15% of the Construction Cost Estimate

#### Project Schedule

This project is currently in the environmental phase. The project schedule is as follows:

PAED: August 2009 PS&E: January 2011 RTL: March 2012 Begin Construction: July 2012 End Construction: February 2015

#### Project Benefits

- The project benefits were derived from the following documents:
  - Approved Project Study Reports

#### Transportation 2030 Plan for the San Francisco Bay Area – FINAL – February 2005

RTP (T2030) PROJECT DESCRIPTION	PAGE	ID#
Mrn 101 – Widen US 101 from Route 37 to the Sonoma County line from 4 lanes to 6 lanes (including 2 HOV	98	98154
lanes) and convert some highway sections to freeway		
standards		
Son 101- Widen US 101 (adding and HOV lane in each	122	98147
direction from the Marin/Sonoma County line north to Old		
Redwood Highway in Petaluma, and convert some		
highway sections from expressway to freeway		

(Copies of these reports are available upon request. See Project Narrative for a detailed description of the project benefits.)

#### Project Contingency Funding

The preliminary project cost estimate is based on the current scope with 16% contingency.
 Future cost increases are anticipated to be funded by future federal, STIP, and local fund sources.

#### Project Funding Plan

o The proposed project funding plan reflects the combination of federal, STIP, TCRP, local sales tax measure, and CMIA funds. This proposed plan would further the objectives of the CMIA program by ultimately delivering additional improvements and congestion relief earlier than planned. See attached Funding Plan.

District:	4	Project #	16
		EA:	264000
PROJECT:	US 101 HOV Lanes - Narrows Phase A (SR 37 to Atherton Ave)	PPNO:	360F

1A PROJECT DATA		
Type of Project		
Select project type from list	General Highway	
Project Location (enter 1 for So. Cal., 2 for No.	Cal., or 3 for rural)	2
Length of Construction Period	3 years	
Length of Peak Period(s) (up to 8 hrs)	Existing hours	

Highway Design	Existing	New
Number of General Traffic Lanes	6	6
Number of HOV Lanes	0	2
HOV Restriction (2 or 3)	2	
Highway Free-Flow Speed	55	65
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	3.0	3.0
Affected Area	3.0	3.0
Average Daily Traffic  Current	128,000	
	w/o Project	w/ Project
Base (Year 1)	129,716	129,716
Forecast (Year 20)	140,586	140,586
Average Hourly HOV Traffic (if HOV lanes)	1,500	1,500
Percent Traffic in Weave (if oper. improvement)		
Percent Trucks (include RVs, if applicable)	7.0%	7.0%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		
	1	

1C HIGHWAY ACCIDENT DATA			
Actual 3-Year Accident Data for Facility			
	Count (No.)	Rate	
Fatal Accidents	1	0.00	
Injury Accidents	57	0.14	
Property Damage Only (PDO) Accidents	83	0.20	
Statewide Average for Highway Classification			
Accident Rate (per million vehicle-miles)	Existing	New	
,	0.39	0.39	
	1.5%	1.5%	
Percent Fatal Accidents			

E				
L				
	-			
L				

#### TOTAL CMIA PROJECT COSTS (in escalated dollars)

From Project Nomination Fact Sheet:		
Fiscal Year:		
Before 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 After	\$ 10,000,000 \$ 10,000,000 \$ 10,000,000	
TOTAL Escalation Factor	\$ 30,000,000 3.5%	

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

Prepare Model for Second Road

District:	4	Project #	15
		EA:	264000
PROJECT:	US 101 HOV Lanes - Narrows Phase B (Atherton Road to SR 116)	PPNO:	360F

1A PROJEC	PROJECT DATA		
Type of Project	Enter HOV restriction in section 1B		
Select project type from list	HOV Lane		
Project Location (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural)			
Length of Construction Period	4 years		
Length of Peak Period(s) (up to 8 hrs)	3.0 hours		
	· · · · · · · · · · · · · · · · · · ·		

Number of HOV Lanes HOV Restriction (2 or 3)  Highway Free-Flow Speed Ramp Design Speed (if aux. lane/off-ramp proj.) Length (in miles) Highway Segment Affected Area  Average Daily Traffic Current 128	4 4 0 2 2 2 55 65 65 35 35 3.3 8.3 8.3 8.3 8.3
HOV Restriction (2 or 3)  Highway Free-Flow Speed Ramp Design Speed (if aux. lane/off-ramp proj.) Length (in miles) Highway Segment Affected Area  Average Daily Traffic Current Length (in miles) Current Length (in miles) Length	2 55 65 55 35 35 33 8.3 8.3 8.3
Highway Free-Flow Speed  Ramp Design Speed (if aux. lane/off-ramp proj.)  Length (in miles) Highway Segment  Affected Area  Average Daily Traffic  Current 128	55 65 85 35 3.3 8.3 3.3 8.3
Ramp Design Speed (if aux. lane/off-ramp proj.)   3	35 35 3.3 8.3 3.3 8.3
Ramp Design Speed (if aux. lane/off-ramp proj.) Length (in miles) Highway Segment 8 Affected Area 8  Average Daily Traffic Current 128	35 35 3.3 8.3 3.3 8.3
Length (in miles)         Highway Segment Affected Area         8           Average Daily Traffic Current         2	8.3 8.3 8.3
Average Daily Traffic  Current 128	8.3
Average Daily Traffic  Current 128	
	3,000
	3,000
w/o F	
	Project w/ Proje
Base (Year 1) 130	0,189   130,18
Forecast (Year 20) 140	0,586 140,58
	500 1,500
Percent Traffic in Weave (if oper. improvement)	
	0% 7.0%
Truck Speed (if passing lane project)	
	eak Non-Pe
	0 0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)	
L	

1C HIGHWAY ACCIDENT DATA				
Actual 3-Year Accident Data for Facility				
	Count (No.)	Rate		
Fatal Accidents	5	0.00		
Injury Accidents	228	0.20		
Property Damage Only (PDO) Accidents	325	0.28		
Statewide Average for Highway Classificati	on			
	Existing	New		
Accident Rate (per million vehicle-miles)	0.65	0.65		
Percent Fatal Accidents	3.6%	1.5%		
Percent Injury Accidents	43.6%	33.8%		

$\bigcirc$		

TOTAL CMIA PROJECT COSTS (in escalated dollars)

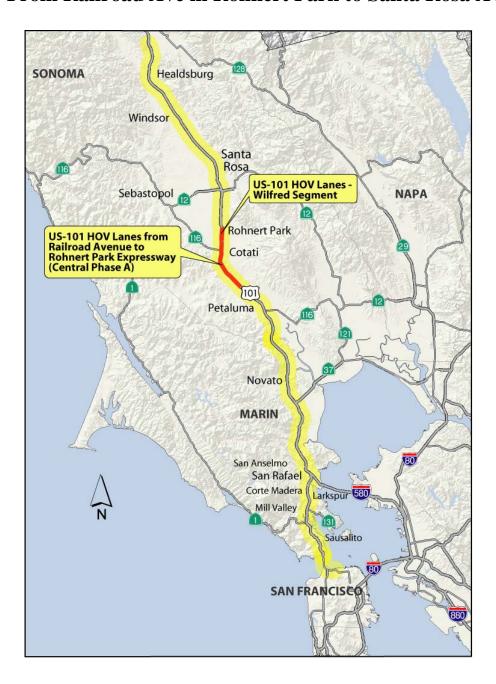
From Project Nomination Fact Sheet:			
Fiscal Year:			
Before 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 After			
TOTAL	\$ 349,000,000		
Escalation Factor	3.5%		

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

Prepare Model for Second Road

## **Project Location Map**

## **US-101 HOV Lanes Extension South of Santa Rosa From Railroad Ave in Rohnert Park to Santa Rosa Ave**



#### CMIA PROJECT NARRATIVE

#### **SONOMA US 101-HOV Extension Projects:**

Central Phase A-Railroad Ave. in Cotati to Rohnert Park Expwy. in Rohnert Park Wilfred Phase- Santa Rosa Ave in Santa Rosa to Rohnert Park Expwy. in Rohnert Park

#### **Travel Corridor Description**

The US 101 – North corridor extends 84-miles through the North Bay counties of Marin and Sonoma and is the principal north-south route in the coastal northwest between the San Francisco Bay Area and the State of Oregon. The 101 Corridor is a lifeline for Northern California commuters and commerce, connecting San Francisco with Marin County and the rapidly growing Sonoma and Mendocino Counties. US 101 is included in California's Freeway and Expressway System and is identified by the State as both an Interregional Road System Route and Focus Route. US 101 supports the movement of goods and services between the Bay Area and the Northern States and provides residents and visitors with access to jobs, housing, parks and recreation, tourism and shopping.

The facility is predominantly a six-lane freeway except for a four-lane, 7-mile expressway portion that straddles the Marin-Sonoma County line known as "the Narrows". Transit is provided by the Golden Gate Bridge, Highway Transit District (GGBHTD), which operates, bus and ferry service along the corridor. There is no regional or local rail service. Along extensive portions of US 101 in the North Bay, there are no parallel arterials that can meaningfully serve as alternatives to the highway.

High Occupancy Vehicle (HOV) lanes have been in operation in Marin County since the mid-1980's and currently operate in segments from Mill Valley to Larkspur and from San Rafael to Novato. The HOV lane gap between Larkspur and San Rafael is being closed with the construction of a new HOV segment which is expected to be complete in 2008. In Sonoma County, a short 4-mile HOV lane segment has been in operation since 2002 in the southern part of Santa Rosa.

#### **Project Function**

The projects proposed under this CMIA application would extend the HOV lanes in Sonoma County from their existing southerly terminus at Santa Rosa Avenue an additional 5 miles to the south, ending at Railroad Avenue. This expansion is part of the overall plan for the US 101 corridor to provide congestion relief by implementing continuous HOV lanes from southern Marin County and the Town of Windsor in Sonoma County.

The proposal consists of two primary elements: The Central Phase A project will add about 3 miles of HOV lanes in each direction from Railroad Avenue in Cotati to Rohnert Park Expressway in Rohnert Park. The Wilfred Phase will add about 2 miles of HOV lanes between Rohnert Park Expressway and Santa Rosa Avenue in Santa Rosa. These projects are part of the three-phase Sonoma County HOV Lane Extension project (Wilfred Phase, North Phases A & B, and Central Phases A & B) to extend the HOV

network from Petaluma, 22miles to the Town of Windsor. The proposed project will serve to alleviate existing and projected congestion along this corridor, as well as upgrade the facility to improve safety and meet operational requirements.

#### **Project Benefits**

#### A. Operations and Safety

The addition of HOV lanes will reduce congestion by adding capacity and increasing the person-throughput of the facility. Traffic conditions along the US 101 corridor in Marin and Sonoma Counties have become increasingly congested due to escalating regional growth, resulting in this corridor becoming the second most congested in the Bay Area. Within the limits of these projects, US 101 experiences average annual daily traffic (AADT) volumes of as high as 100,000 vehicles. Truck traffic accounts for nearly 7% of the peak hour traffic volume.

The Central Phase A and Wilfred Phase projects will encourage HOV use and improve mainline traffic operations. These improvements will decrease congestion and promote alternative transportation by offering timesavings to carpoolers and transit riders. Safety will be improved with the addition of auxiliary lanes and shoulder improvements where needed. Additionally, traffic management capabilities will be added to enable incident and traffic monitoring controls. These upgrades will significantly improve access to and enhance safety on the US 101 corridor.

#### B. Air Quality

Marin and Sonoma Counties are part of the San Francisco Bay Area Air Quality Basin. The Region currently meets the National attainment standards for Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter (PM<sub>10</sub>), fine Particulate Matter (PM<sub>2.5</sub>), and lead however, does not meet the current State standards for Ozone, PM<sub>10</sub> and PM<sub>2.5</sub>. The projected reductions in daily vehicle hours of delay from this project will have a beneficial effect on air quality. As motorist travel times and speeds increase, significant reductions in air pollutant emissions will be attained.

#### C. Access to Jobs, Housing, Markets, and Commerce

US 101 is the primary transportation corridor serving the employment and residential areas of the North Bay and is the only north-south transportation corridor through Sonoma County. As a commute corridor, it is the main access route from Sonoma County to the many employment destinations in Marin County and San Francisco. Within Sonoma County, Santa Rosa is also attracting commute trips due to its commercial and employment growth. An addition of approximately 10,000 new jobs between 2003 and 2015 is projected. The Central Phase A and Wilfred Phase project will add capacity in the form of HOV and auxiliary lanes thereby significantly addressing the growing needs of the Marin, Sonoma and Northern county businesses and major employers.

US 101 provides access to major recreational and tourist destinations within Marin and Sonoma Counties and beyond. Due to its growing wine industry, Sonoma County has become a major tourist destination. In addition to typical weekday congestion, weekend

congestion continues to grow due to tourism and recreational trips to the Golden Gate National Recreational Area (GGNRA), Marin Headlands, Muir Woods, the Russian River, North Coast beaches, and Sonoma County wineries.

The corridor also serves as the primary regional freight link to California's north coastal area and the Oregon border and as such is a significant goods movement corridor serving Marin and Sonoma Counties. Trucks constitute 7% of the traffic volume within the limits of these projects and congestion during the peak periods significantly delays the on-time delivery of goods and services. This project will provide increased capacity, thereby improving truck traffic flow and the movement of goods. Improved reliability of goods movement along the corridor will promote economic growth, sustain existing businesses and attract new investors to the North Bay.

#### **Project Risks**

There are schedule and funding issues involving right-of-way certification. The SCTA is addressing a shortfall in right of way funding. The right-of-way agreement also must be processed in a timely manner in order to start the right-of-way acquisition. Complex staging projects such as this project typically result in escalated costs; however; the advanced state of design (65%) has likely identified most of the costs associated with construction staging. Finally, fluctuations in the cost of construction materials may have impacts on the cost.

#### Corridor System Management Plan / Preserving Mobility Gains

The California Department of Transportation District 4 (Caltrans D4) and the Metropolitan Transportation Commission have recently launched a joint effort entitled the Freeway Performance Initiative. The intent of this effort is to advance a corridor based and performance driven transportation planning process, employing tested system management principles and strategies to maximize the efficiency of the existing transportation infrastructure. Corridor stakeholders have been identified and a consultant team has been selected to begin a detailed performance assessment. Preliminary analysis and recommended strategies are anticipated by Summer 2007. Additionally, the Transportation Authority of Marin and the Sonoma County Transportation Authority, in collaboration with the Mendocino Council of Governments have developed a draft Corridor System Management Plan that describes the history of corridor investments as well as identifies future needs to support the areas projected economic growth.

The Central Phase A and Wilfred Phase projects will enhance existing devices and install new elements where gaps in ITS coverage exist. TOS elements, such as Closed-Circuit Televisions (CCTV), Changeable Message Signs (CMS), Extinguishable Message Signs (EMS), Highway Advisory Radios (HAR) and Traffic Monitoring Stations (TMS), will enable system management of corridor investments by facilitating improved incident management and dissemination of motorist information by transmitting information to the Caltrans Traffic Management Center. These projects also propose to implement ramp metering at designated ramp locations. As future projects are programmed, there will be opportunities to install more TOS equipment in the corridor.

#### APPENDIX A

#### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

#### **Project Nomination Fact Sheet**

Nominating Ager	ncy: Sonoma County Transportation	on Authority	Fact Sheet Date:	01/11/07
Contact Person	Guy Preston			
Phone Number	707-565-5377	Fax Number	707-565-5370	
Email Address	gpreston@sctainfo.org			

Project Informatio	n:						
County	Caltrans District	PPNO *	EA *	Region/MPO/ TIP ID*	Route / Corridor *	Post Mile Back *	Post Mile Ahead *
Sonoma	4	0781E	129650	SON950005	101	13.9	15.5
* NOTE: PPNO & EA as:	signed by Calt	trans. Region/M	IPO/TIP ID assign	ed by RTPA/MPO. Route/Corrido	r & Post Mile Ba	ck/Ahead used for Stat	e Highway System.
Legislative Districts	Senate:	3		Congressional	: 6		
-cgiolative Districts	Assembly:	6					
Implementing Agency	PA&ED:	Caltrans		PS&E: Calt	rans		
(by component)	R/W:	Caltrans		CON: Calt	rans		
Project Title	US-101 H	IOV Lanes -	· Wilfred Seg	ment			
transit, and adds ar	es capacity nauxiliary la	to reduce of ane and nev	v local connec	ojected congestion, extend tions to improve safety an	d operation.		rpooling and
Project Delivery Miles	tones (mont	h/year):					
Project Study Report (P	SR) complet	e	Jul-9	1			
Notice of Preparation	Document 7	Гуре: IS/E/	A Oct-9	99			
Begin Circulation of Dra	aft Environme	ental Documen	t Jun-0	)4			
Final Approval of Enviro	onmental Doc	cument	Dec-	06			
Completion of plans, sp	ecifications,	and estimates	Dec-	07			
Right-of-way certificatio	n		Aug-	08			
Ready for advertisemer							
ready for advertisemen	nt		Sep-	08			
Construction contract a			Sep-0 Dec-0				

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

## CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan

(dollars in thousands and escalated)

Shaded fields are automatically calculated. Please do not fill these fields.

				Date:	11-Jan-07
County	CT District	PPNO *	EA*	Region/MF	PO/TIP ID *
Sonoma	4	0781E	129650	SON9	50005
Project Title:	US-101 HOV	Lanes - Wilfred Segment			

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

Proposed Total Project Cost							Project	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	3,900	0	0	0	0	0	0	3,900
PS&E	3,600	0	0	0	0	0	0	3,600
R/W SUP (CT) *	840	0	0	0	0	0	0	840
CON SUP (CT) *	0	0	7,200	0	0	0	0	7,200
R/W	5,600	0	0	0	0	0	0	5,600
CON	0	0	62,500	0	0	0	0	62,500
TOTAL	13,940	0	69,700	0	0	0	0	83,640

Corridor Manageme	Corridor Management Improvement Account (CMIA) Program							
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *			2,200					2,200
R/W								0
CON			40,800					40,800
TOTAL	0	0	43,000	0	0	0	0	43,000

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:	State Trans	sportation I	mprovemer	nt Plan (ST	IP) - RIP - I	Existing		
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	3,157							3,157
PS&E	3,350							3,350
R/W SUP (CT) *	700							700
CON SUP (CT) *			5,000					5,000
R/W	1,100							1,100
CON			5,000					5,000
TOTAL	8,307	0	10,000	0	0	0	0	18,307

Funding Source:	State Trans	sportation I	mprovemer	nt Plan (ST	IP) - GF RI	Р		
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	743							743
PS&E	250							250
R/W SUP (CT) *	140							140
CON SUP (CT) *								0
R/W	1,200							1,200
CON								0
TOTAL	2,333	0	0	0	0	0	0	2,333

Funding Source:	Local Fund							
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W	3,300							3,300
CON			16,700					16,700
TOTAL	3,300	0	16,700	0	0	0	0	20,000

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

County         CT District         PPNO *         EA*         Region/M           Sonoma         4         0781E         129650         SON           Project Title:         US-101 HOV Lanes - Wilfred Segment           * NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO           Funding Source:           Component         Prior         07/08         08/09         09/10         10/11         11/12         12/13	PO/TIP ID * 950005
Sonoma 4 0781E 129650 SON: Project Title: US-101 HOV Lanes - Wilfred Segment * NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO Funding Source:	950005
* NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO  Funding Source:	
Funding Source:	
Component   Drier   07/09   09/00   00/10   10/11   11/12   12/12	
	Total
E&P (PA&ED)	0
PS&E	0
R/W SUP (CT) *	0
CON SUP (CT) *	0
R/W	0
CON	0
TOTAL 0 0 0 0 0 0 0	0
Funding Source:	
Component         Prior         07/08         08/09         09/10         10/11         11/12         12/13	Total
E&P (PA&ED)	0
PS&E	0
R/W SUP (CT) *	0
CON SUP (CT) *	0
R/W	0
CON	0
TOTAL 0 0 0 0 0 0 0	0
Funding Source:	
Component Prior 07/08 08/09 09/10 10/11 11/12 12/13	Total
E&P (PA&ED)	0
PS&E	0
R/W SUP (CT) *	0
CON SUP (CT) *	0
R/W	0
CON	0
TOTAL 0 0 0 0 0 0	0
Funding Source:	
Component Prior 07/08 08/09 09/10 10/11 11/12 12/13	Total
E&P (PA&ED)	0
PS&E	0
R/W SUP (CT) *	0
CON SUP (CT) *	0
R/W	0
CON	0
TOTAL 0 0 0 0 0 0	0
Additional Funding Needs (funding needs not yet committed)	
	Total
Component Prior 07/08 08/09 09/10 10/11 11/12 12/13+	0
	U
E&P (PA&ED)	
E&P (PA&ED) PS&E	0
E&P (PA&ED) PS&E R/W SUP (CT) *	
E&P (PA&ED)  PS&E  R/W SUP (CT) *  CON SUP (CT) *	0 0
E&P (PA&ED) PS&E R/W SUP (CT) *	0

#### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

#### **Project Nomination Fact Sheet**

Nominating Agenc	y: Sonoma County Transportation Authority		Fact Sheet Date:	01/11/07
Contact Person	Guy Preston			
Phone Number	(707) 565-5377	Fax Number	(707) 565-5370	
Email Address	gpreston@sctainfo.org			

County	Caltrans District  PPNO * EA * Region/I		Region/MI	on/MPO/ TIP ID*		Route / Corridor *	Post Mile Back *	Post Mile Ahead *		
Sonoma	4	775	0A1800 SON				101	10.6	13.9	
* NOTE: PPNO & EA &	assigned by	Caltrans. Region	n/MPO/TIP ID assigned	by RTPA/MPO.	Route/Co	orridor	& Post Mile Ba	ck/Ahead used for St	tate Highway System	
Il agielativa Dietricte	Senate: 3				Congres	ssional:	: 6			
_egislative Districts	Assembly:	Assembly: 6								
Implementing Agency	PA&ED:	SCTA			PS&E: SCTA					
(by component)	R/W:	R/W: Caltrans					rans			
Project Title	US-101 F	lOV Lanes fr	om Railroad Avenu	ue to Rohner	t Park E	Expre	ssway (Cenf	tral Phase A)		

lighway 101, improve access and circulation between Route 116 and Highway 101, and upgrade facility to current standards.

#### Description of Major Project Benefits

Completes 3.3 miles of the HOV Master Plan; reduces recurrent congestion; encourages carpooling and transit ridership; reduces emmissions; improve safety. Widen from 4 to 6 lanes for High Occupancy Vehicle Lanes; Adds HOV lanes in both directions, adds auxiliary lanes, vertical curve correction, vertical clearance correction, sight distance improvements, clear recovery zone improvements, standard shoulders. Project adds ITS elements, including ramp metering.

Expected Source(s) of Additional Funding Necessary to Complete Project - as Identified Under 'Additional Need'

Project Delivery Milestones (month/year):	Project Delivery Milestones (month/year):						
Project Study Report (PSR) complete	December-01						
Notice of Preparation Document Type:	Environmental Assessment/Draft Environmental Impact Report						
Begin Circulation of Draft Environmental Document		Aug-06					
Final Approval of Environmental Document		May-07					
Completion of plans, specifications, and estimates		Feb-08					
Right-of-way certfication		Nov-08					
Ready for advertisement		Dec-08					
Construction contract award		Apr-09					
Construction contract acceptance		Dec-11					

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet. A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

## CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan

(dollars in thousands and escalated)

Shaded fields are automatically calculated. Please do not fill these fields.

				Date:	11-Jan-07
County	CT District	PPNO *	EA*	Region/MP	PO/TIP ID *
Sonoma	4	775	0A1800	SON0	10024
Project Title:	US-101 HOV	Lanes from Railroad Avenu	ie to Rohnert Park Expressway (Central P	Phase A)	

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	ject Cost							Project
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	3,500	0	0	0	0	0	0	3,500
PS&E	10,000	0	0	0	0	0	0	10,000
R/W SUP (CT) *	750	0	0	0	0	0	0	750
CON SUP (CT) *	0	0	9,300	0	0	0	0	9,300
R/W	9,700	0	0	0	0	0	0	9,700
CON	0	0	77,000	0	0	0	0	77,000
TOTAL	23,950	0	86,300	0	0	0	0	110,250

Corridor Management Improvement Account (CMIA) Program									
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total	
E&P (PA&ED)								0	
PS&E								0	
R/W SUP (CT) *								0	
CON SUP (CT) *			4,300					4,300	
R/W								0	
CON			38,548					38,548	
TOTAL	0	0	42,848	0	0	0	0	42,848	

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:	State Trans	sportation I	mprovemer	nt Program	- RIP - Exis	sting		
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	3,000							3,000
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *			5,000					5,000
R/W								0
CON			31,402					31,402
TOTAL	3,000	0	36,402	0	0	0	0	39,402

Funding Source:	Sonoma C	ounty Tax N	Measure M					
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	500							500
PS&E	10,000							10,000
R/W SUP (CT) *	750							750
CON SUP (CT) *								0
R/W	9,700							9,700
CON			7,050					7,050
TOTAL	20,950	0	7,050	0	0	0	0	28,000

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

							Date:	11-Jan-07
County	CT District	PPN			EA*		Region/MF	
Sonoma	4		775 0A1800 es from Railroad Avenue to Rohnert Park Expressway (Central Phase				10024	
Project Title:					Park Expressy	vay (Central F	Phase A)	
* NOTE: PPNO and EA as	signed by Caltrans.	Region/MPO/TIP	ID assigned by RT	PA/MPO				
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:			•		· · · · · · · · · · · · · · · · · · ·		1	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
			-					
Additional Funding	Needs (fund	ing needs no	t yet commit	ted)				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13+	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
	U	U	U	U	U	0	U	V

## BASIS OF PROJECT SCOPE, SCHEDULE, AND BENEFITS US 101 HOV LANES - WILFRED

#### Project Scope

- o The scope of this project was developed based on the 1991 approved Project Study Report and August 2004 approved Draft Project Report. The project scope included the following elements.
  - Widen US 101 to accommodate 1.6 miles of HOV lanes in each direction from within the vicinity of Wilfred Avenue
  - Add one northbound auxiliary lane
  - Augment an existing park and ride lot
  - Install ITS elements, including ramp metering

#### Project Cost Estimate

- This project is currently in the design. The PS&E is 65% complete. The project estimate was developed based on the following factors.
  - Construction Cost Estimate and Support Costs are in escalated dollars
  - Construction Cost Estimate includes 10% contingency
  - Construction Costs are escalated at 3.5% per year to the middle of the construction period (2010)
  - Construction Engineering and Management Costs are 10% of the Construction Cost Estimate

#### Project Schedule

o This project is currently in the design phase. The PS&E is 65% complete. The project schedule is as follows:

PAED: December 2006
PS&E: December 2007
RTL: August 2008
Begin Construction: December 2011

#### Project Benefits:

- o The project benefits were derived from the following documents:
  - Approved Project Study Report
  - Approved Draft Project Report and associated technical documents
  - Transportation 2030 Plan for the San Francisco Bay Area FINAL February 2005

RTP (T2030) PROJECT DESCRIPTION	PAGE	ID#
Son 101 Widen US 101 for HOV lanes	122	22655
(one in each direction from Rohnert		
Park Expressway to Santa Rosa		
Avenue, includes interchange		
improvements and ramp metering)		

(Copies of these reports are available upon request. See Project Narrative for a detailed description of the project benefits.)

#### Project Contingency Funding

The project cost estimate was developed based on the current scope with a 10% contingency. Future cost increase are anticipated to be funded by future federal, STIP, and local fund sources.

#### Project Funding Plan

The proposed project funding plan reflects the combination of federal, STIP, local sales tax measure, and CMIA funds. This proposed plan would further the objectives of the CMIA program by ultimately delivering additional improvements and congestion relief earlier than planned. See attached Funding Plan.

District:	4	Project #	20a2
		EA:	0A1800
PROJECT:	US 101 HOV Lanes - Central Phase A (Railroad Ave to Rohnert Park Expressway in Rohnert Park) -	PPNO:	775
	Ramp Metering		

1A PROJEC	T DATA
Type of Project	
Select project type from list	Ramp Metering
Project Location (enter 1 for So. Cal., 2 for No. (	Cal., or 3 for rural)
Length of Construction Period	2 years
Length of Peak Period(s) (up to 8 hrs)	Existing hours

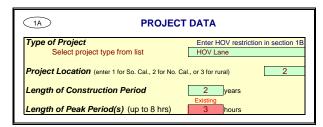
1B HIGHWAY DESIGN AND TRAI	FIC DAT	'A
Highway Design	Existing	New
Number of General Traffic Lanes	4	4
Number of HOV Lanes	0	0
HOV Restriction (2 or 3)	0	
, , , , , , , , , , , , , , , , , , ,		
Highway Free-Flow Speed	65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	3.21	3.21
Affected Area	3.21	3.21
Average Daily Traffic		
Current	114,000	
	w/o Project	w/ Project
Base (Year 1)	116,551	116,551
Forecast (Year 20)	140,784	140,784
Average Hourly HOV Traffic (if HOV lanes)		
Percent Traffic in Weave (if oper. improvement)		
Percent Trucks (include RVs, if applicable)	6%	6%
Truck Speed (if passing lane project)		
	•	
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		
	•	
	l	

(	1C HIGHWAY ACCIDENT DATA				
	Actual 3-Year Accident Data for Facility				
		Count (No.)	Rate		
	Fatal Accidents	1	0.00		
	Injury Accidents	200	0.50		
	Property Damage Only (PDO) Accidents	368	0.92		
	Statewide Average for Highway Classificate	ion			
		Existing	New		
	Accident Rate (per million vehicle-miles)	0.45	0.45		
	Percent Fatal Accidents	3%	3%		
	Percent Injury Accidents	40%	40%		

rom Project Nomination Fact Sheet:		
Fiscal Yea	r.	
Before 2007-08	\$ 1,197,500	
2008-09	\$ 2,157,500	
2009-10 2010-11	\$ 2,157,500	
2011-12 2012-13		
After		
TOTAL	\$ 5,512,500	
Escalation Factor	3.5%	

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project #	20a1
		EA:	0A1800
PROJECT:	US 101 HOV Lanes - Central Phase A (Railroad Ave to Rohnert Park Expressway in Rohnert Park) -	PPNO:	775
	HOV and aux lanes		



Highway Design	Existing	New
Number of General Traffic Lanes	4	6
Number of HOV Lanes	0	2
HOV Restriction (2 or 3)	2	
Highway Free-Flow Speed	65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	3.21	3.21
Affected Area	3.21	3.21
Average Daily Traffic		
Current	114,000	
D (V 4)	w/o Project	w/ Project
Base (Year 1) Forecast (Year 20)	116,551 140,784	116,551 140,784
Average Hourly HOV Traffic (if HOV lanes)	2,236	2,236
Percent Traffic in Weave (if oper. improvement)	2,200	2,200
Percent Trucks (include RVs, if applicable)	6%	6%
Truck Speed (if passing lane project)	070	070
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		
<del></del>		

1C HIGHWAY ACCIDENT DATA				
Actual 3-Year Accident Data for Facility				
	Count (No.)	Rate		
Fatal Accidents	1	0.00		
Injury Accidents	200	0.50		
Property Damage Only (PDO) Accidents	368	0.92		
Statewide Average for Highway Classification	n			
	Existing	New		
Accident Rate (per million vehicle-miles)	0.45	0.45		
Percent Fatal Accidents	3%	3%		
Percent Injury Accidents	40%	40%		
		•		

From Project Nomination Fact Sheet:			
Fiscal Year	r:		
Before	\$	22,752,500	
2007-08			
2008-09	\$	40,992,500	
2009-10	\$	40,992,500	
2010-11			
2011-12			
2012-13			
After			
·			1
TOTAL	\$	104,737,500	
Escalation Factor		3.5%	

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project #	18
		EA:	129650
PROJECT:	US 101 HOV Lanes - Wilfred	PPNO:	0781E

PROJECT DATA		
Type of Project	Enter HOV restriction in section 1B	
Select project type from list	HOV Lane	
Project Location (enter 1 for So. Cal., 2 for No.	Cal., or 3 for rural)	
Length of Construction Period	3 years	
Length of Peak Period(s) (up to 8 hrs)	Existing 5 hours	

Current	65 35 3.00 3.00
Number of HOV Lanes HOV Restriction (2 or 3)  Highway Free-Flow Speed Ramp Design Speed (if aux. lane/off-ramp proj.) Length (in miles) Highway Segment Affected Area  3.00  Average Daily Traffic  Current  Base (Year 1) Forecast (Year 20) Percent Traffic in Weave (if oper. improvement)  Percent Trucks (include RVs, if applicable)  6%  Truck Speed (if passing lane project)	65 35 3.00 3.00
HOV Restriction (2 or 3)  Highway Free-Flow Speed Ramp Design Speed (if aux. lane/off-ramp proj.) Length (in miles) Highway Segment 3.00 Affected Area 3.00  Average Daily Traffic Current 112,84 wo Proje Base (Year 1) 124,88 Forecast (Year 20) 201,08 Average Hourly HOV Traffic (if HOV lanes) 1,568 Percent Traffic in Weave (if oper. improvement) Percent Trucks (include RVs, if applicable) 6% Truck Speed (if passing lane project)	65 35 3.00 3.00
Highway Free-Flow Speed Ramp Design Speed (if aux. lane/off-ramp proj.) Length (in miles) Highway Segment 3.00 Affected Area 3.00  Average Daily Traffic Current 112,84 wo Proje Base (Year 1) 124,88 Forecast (Year 20) 201,08 Average Hourly HOV Traffic (if HOV lanes) 1,568 Percent Traffic in Weave (if oper. improvement) Percent Trucks (include RVs, if applicable) 6% Truck Speed (if passing lane project)	35 3.00 3.00
Ramp Design Speed (if aux. lane/off-ramp proj.)   35   3.00	35 3.00 3.00
Ramp Design Speed (if aux. lane/off-ramp proj.)   35   3.00	35 3.00 3.00
Ramp Design Speed (if aux. lane/off-ramp proj.)   35   1.5	3.00 3.00
Affected Area 3.00  Average Daily Traffic  Current 112,84  w/o Proje  Base (Year 1) 124,88  Forecast (Year 20) 201,08  Average Hourly HOV Traffic (if HOV lanes) 1,568  Percent Traffic in Weave (if oper, improvement)  Percent Trucks (include RVs, if applicable) 6%  Truck Speed (if passing lane project)	3.00
Average Daily Traffic  Current  Base (Year 1) Forecast (Year 20)  Average Hourly HOV Traffic (if HOV lanes)  Percent Traffic in Weave (if oper. improvement)  Percent Trucks (include RVs, if applicable)  Truck Speed (if passing lane project)	9
Current	
Base (Year 1)	
Forecast (Year 20) 201,08  Average Hourly HOV Traffic (if HOV lanes) 1,568  Percent Traffic in Weave (if oper. improvement)  Percent Trucks (include RVs, if applicable) 6%  Truck Speed (if passing lane project)	
Average Hourly HOV Traffic (if HOV lanes) 1,568 Percent Traffic in Weave (if oper. improvement) Percent Trucks (include RVs, if applicable) 6% Truck Speed (if passing lane project)	
Percent Traffic in Weave (if oper. improvement) Percent Trucks (include RVs, if applicable) 6% Truck Speed (if passing lane project)	
Truck Speed (if passing lane project)	.,
	6%
On-Ramp Volume  Hourly Ramp Volume (if aux. lane/on-ramp proj.)  0	Non-Peak 0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)	U
Metering Strategy (1, 2, 3, or b, ii orr-ramp proj.)	

#### 1C) **HIGHWAY ACCIDENT DATA** Actual 3-Year Accident Data for Facility 0.00 Fatal Accidents 0.14 Injury Accidents 51 Property Damage Only (PDO) Accidents 135 0.36 Statewide Average for Highway Classification Accident Rate (per million vehicle-miles) 1.26 0.98 Percent Fatal Accidents 1% 1% Percent Injury Accidents 32% 31%

$\bigcirc$	

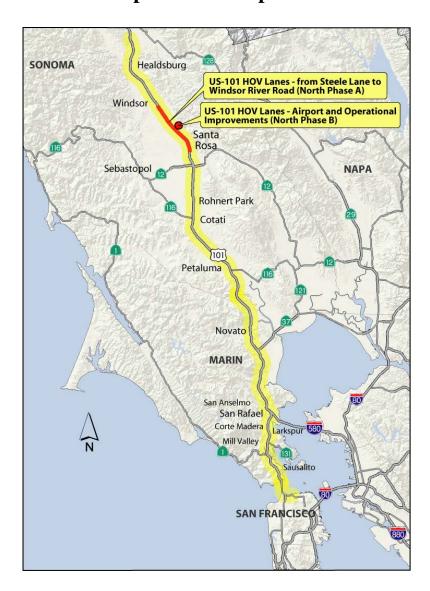
#### TOTAL CMIA PROJECT COSTS (in escalated dollars)

From Project Nomination Fact Sheet:		
Fiscal Year:		
Before 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 After	\$ 27,666,667 \$ 27,666,667 \$ 27,666,667	
TOTAL Escalation Factor	\$ 83,000,000 3.5%	

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

### **Project Location Map**

### US-101 HOV Lanes North of Santa Rosa From Steele Lane to Windsor River Road Including Airport I/C and Operational Improvements



#### CMIA PROJECT NARRATIVE

#### **SONOMA US 101-HOV Extension Projects:**

North Phase A-Steele Lane in Santa Rosa to Windsor River Road in Windsor North Phase B-Airport Overcrossing and Operational Improvements in Windsor

#### **Travel Corridor Description**

The US 101 – North corridor extends 84-miles through the North Bay counties of Marin and Sonoma and is the principal north-south route in the coastal northwest between the San Francisco Bay Area and the State of Oregon. The 101 Corridor is a lifeline for Northern California commuters and commerce, connecting San Francisco with Marin County and the rapidly growing Sonoma and Mendocino Counties. US 101 is included in California's Freeway and Expressway System and is identified by the State as both an Interregional Road System Route and Focus Route. US 101 supports the movement of goods and services between the Bay Area and the Northern States and provides residents and visitors with access to jobs, housing, parks and recreation, tourism and shopping.

The facility is predominantly a six-lane freeway except for a four-lane, 7-mile expressway portion that straddles the Marin-Sonoma County line known as "the Narrows". Transit is provided by the Golden Gate Bridge, Highway Transit District (GGBHTD), which operates, bus and ferry service along the corridor. There is no regional or local rail service. Along extensive portions of US 101 in the North Bay, there are no parallel arterials that can meaningfully serve as alternatives to the highway.

High Occupancy Vehicle (HOV) lanes have been in operation in Marin County since the mid-1980's and currently operate in segments from Mill Valley to Larkspur and from San Rafael to Novato. The HOV lane gap between Larkspur and San Rafael is being closed with the construction of a new HOV segment which is expected to be complete in 2008. In Sonoma County, a short 4-mile HOV lane segment has been in operation since 2002 in the southern part of Santa Rosa.

#### **Project Function**

The projects proposed under this CMIA application extend the HOV lane system in Sonoma County from Steele Lane in Santa Rosa to Windsor River Road in Windsor, and would improve the Airport interchange in Windsor. This expansion is the northernmost part of the overall plan for the US 101 North corridor to provide congestion relief by implementing continuous HOV lanes from southern Marin County to the Town of Windsor in Sonoma County.

The proposal consists of two primary elements: The North Phase A project will add nearly 8 miles of HOV lanes in each direction from Steele Lane to Windsor River Road in Sonoma County. The North Phase B project will widen the Airport Boulevard overcrossing and provide other operational and safety improvements at the interchange such as a collector-distributor road between the Airport and Fulton interchanges, correct ramp geometry and improve shoulders, These projects are part of the three-phase Sonoma County HOV Lane Extension project (Wilfred Phase, North Phases A & B, and Central

Phases A & B) to extend the HOV network from Petaluma, 22miles to the Town of Windsor. The proposed project will serve to alleviate existing and projected congestion along this corridor, as well as upgrade the facility to improve safety and meet operational requirements.

#### **Project Benefits**

#### A. Operations and Safety

The addition of HOV lanes will reduce congestion by adding capacity and increasing the person-throughput of the facility. Traffic conditions along the US 101 corridor in Marin and Sonoma Counties have become increasingly congested due to escalating regional growth, resulting in this corridor becoming the second most congested in the Bay Area. Within the limits of these projects, US 101 experiences an average annual daily traffic (AADT) volumes of as high as 106,000 vehicles. Truck traffic accounts for over 5% of the peak hour traffic volume.

The North Phase A project will encourage HOV use and improve mainline traffic operations. The addition of HOV lanes will increase the person-throughput of the facility by adding capacity, which will improve operations for non-HOVs, allowing eligible vehicles to bypass any congestion with their limits and helpingclose the HOV gap between Marin and Sonoma counties. These improvements will decrease congestion and promote alternative transportation by offering a time savings to carpoolers and transit riders. Operations and Safety will also be improved in the area of the Airport Boulevard interchange with the addition of a southbound collector-distributor road, geometry corrections and shoulder improvements. Additionally, traffic management capabilities will be added by these projects to enable incident and traffic monitoring controls. These upgrades will significantly improve access to and enhance safety on the US-101 corridor.

#### B. Air Quality

Marin and Sonoma Counties are part of the San Francisco Bay Area Air Quality Basin. The Region currently meets the National attainment standards for Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter (PM<sub>10</sub>), fine Particulate Matter (PM<sub>2.5</sub>), and lead however, does not meet the current State standards for Ozone, PM<sub>10</sub> and PM<sub>2.5</sub>. The projected reductions in daily vehicle hours of delay from this project will have a beneficial effect on air quality. As motorist travel times and speeds increase, significant reductions in air pollutant emissions will be attained.

#### C. Access to Jobs, Housing, Markets, and Commerce

US 101 is the primary transportation corridor serving the employment and residential areas of the North Bay and is the only north-south transportation corridor through Sonoma County. As a commute corridor, it is the main access route to the many employment destinations in Marin County and San Francisco. Within Sonoma County, Santa Rosa is also attracting commute trips due to its commercial and employment growth. An addition of approximately 10,000 new jobs between 2003 and 2015 is projected. The North Phase A and B projects will add capacity in the form of HOV and auxiliary lanes thereby significantly addressing the growing needs of the Marin, Sonoma and Northern county businesses and major employers.

US 101 provides access to major recreational and tourist destinations within Marin and Sonoma Counties and beyond. Due to its growing wine industry, Sonoma County has become a major tourist destination. In addition to typical weekday congestion, weekend congestion continues to grow due to tourism and recreational trips to the Golden Gate National Recreational Area (GGNRA), Marin Headlands, Muir Woods, the Russian River, North Coast beaches, and Sonoma County wineries.

The corridor also serves as the primary regional freight link to California's north coastal area and the Oregon border. Trucks constitute 5% of the traffic volume within the the limits of these projects and congestion during the peak periods significantly delays the on-time delivery of goods and services. This project will provide increased capacity, thereby improving truck traffic flow and the movement of goods. Improved reliability of goods movement along the corridor will promote economic growth, sustain existing businesses and attract new investors to the North Bay.

#### **Project Risks**

The uncertainty of the project funding has impacts on the scope of this project. The project limits are still in flux, unless full funding can be obtained. To expedite project delivery, "Risk Design" (concurrent preparation of the environmental document and design plans) was initiated; however, in using this approach, there will be a risk that any new information or finding in the final environmental document may trigger some design change. Caltrans will also have to expeditiously prepare the PS&E package, but the design is currently underway and nearing 65% completion. The uncertainty of the scope has implications in this regard. Finally, fluctuations in the cost of construction materials could impact the project cost, though every effort is being made to produce accurate estimates.

#### **Corridor System Management Plan / Preserving Mobility Gains**

Caltrans District 4 and the Metropolitan Transportation Commission have recently launched a joint effort entitled the Freeway Performance Initiative. The intent of this effort is to advance a corridor based and performance driven transportation planning process, employing tested system management principles and strategies to maximize the efficiency of the existing transportation infrastructure. Corridor stakeholders have been identified and a consultant team has been selected to begin a detailed performance assessment. Preliminary analysis and recommended strategies are anticipated by Fall 2007.

A major element of the North Phase B project is to install the TOS infrastructure on this section of the US 101 corridor. Thus, in order to achieve the goals of system management, both components of this proposal — Phases A and B — must be constructed.

#### **APPENDIX A**

#### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

#### **Project Nomination Fact Sheet**

Nominating Agence	y: Sonoma County Transportation Authority		Fact Sheet Date:	01/11/07
Contact Person	Guy Preston			
Phone Number	707-565-5377	Fax Number	707-565-5370	
Email Address	gpreston@sctainfo.org			

County	Caltrans District	PPNO *	EA*	Region/MI	PO/ TIP ID*	Route / Corridor *	Post Mile Back *	Post Mile Ahead		
Sonoma	4	0749A	0A100K	SONO	10025	101	21.7	29.3		
* NOTE: PPNO & EA assig	ned by Calt	rans Region/M	I IP∩/TIP ID assign	ed by RTPA/MP	O Route/Corrido	r & Post Mile Bar	k/Ahead used for State	Highway System		
		2	ii O/Tii ID assigi	iou by ivii Avivii	Congressional		civalicad used for Glati	e riigiiway Oysteiii.		
Legislative Districts	Assembly:				pongrooma. o					
	<u> </u>		nty Transportatio	n Agency	PS&E: Calt	rans				
(by component)		Caltrans	.,	····ge····y	CON: Calt					
Project Title	US-101 H	OV Lanes	from Steele L	ane to Wind	sor River Ro	oad (North P	hase A)			
The project increases Sonoma County for e	s capacity eventual c	to alleviate connectivity								
Description of Major Pro The project increases Sonoma County for e ramps to enhance sa	s capacity eventual c fety and c	to alleviate connectivity operation.	with Marin Co	unty to encou	urage carpool	ing and trans	it, and adds auxili			
The project increases Sonoma County for e ramps to enhance sa	s capacity eventual c fety and c	to alleviate connectivity operation.	with Marin Co	unty to encou	urage carpool	ing and trans	it, and adds auxili			
The project increases Sonoma County for e ramps to enhance sa Expected Source(s) of A None	s capacity eventual c fety and c  Additional	to alleviate connectivity operation.  Funding Neco	essary to Comp	unty to encou	urage carpool	ing and trans	it, and adds auxili			
The project increases Sonoma County for e ramps to enhance sa Expected Source(s) of A None  Project Delivery Milesto Project Study Report (PS	s capacity eventual c fety and c  Additional  ones (mont	r to alleviate connectivity operation.  Funding Neconstruction  h/year):	essary to Comp	unty to encou elete Project - a	urage carpool	ing and trans	it, and adds auxili			
The project increases Sonoma County for e ramps to enhance sa  Expected Source(s) of A None  Project Delivery Milesto  Project Study Report (PS Notice of Preparation	Additional  Pones (montal Document 1	r to alleviate connectivity operation.  Funding Neconstruction in the content of	essary to Comp	unty to encou plete Project - a	urage carpool	ing and trans	it, and adds auxili			
The project increases Sonoma County for e ramps to enhance sa Expected Source(s) of A None  Project Delivery Milesto  Project Study Report (PS	Additional  Pones (montal completed in the completed in t	Funding Neco	essary to Comp	olete Project - a	urage carpool	ing and trans	it, and adds auxili			

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

May-07

Mar-08

Apr-08

Jun-08

Oct-10

Completion of plans, specifications, and estimates

Right-of-way certfication

Ready for advertisement

Construction contract award

Construction contract acceptance

## CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan

(dollars in thousands and escalated)

Shaded fields are automatically calculated. Please do not fill these fields.

				Date:	11-Jan-07	
County	CT District	PPNO *	EA*	Region/MF	PO/TIP ID *	
Sonoma	4	0749A	0A100K	SONO	010025	
Project Title:	e: US-101 HOV Lanes from Steele Lane to Windsor River Road (North Phase A)					

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	ject Cost								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total	
E&P (PA&ED)	4,500	0	0	0	0	0	0	4,500	
PS&E	6,100	0	0	0	0	0	0	6,100	
R/W SUP (CT) *	500	0	0	0	0	0	0	500	
CON SUP (CT) *	0	12,200	0	0	0	0	0	12,200	
R/W	1,000	0	0	0	0	0	0	1,000	
CON	0	91,200	0	0	0	0	0	91,200	
TOTAL	12,100	103,400	0	0	0	0	0	115,500	

Corridor Manageme	ent Improvem	ent Account	(CMIA) Prog	ram				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *		8,700						8,700
R/W								0
CON		53,800						53,800
TOTAL	0	62,500	0	0	0	0	0	62,500

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:	State Trans	sportation In	mprovemer	nt Plan (ST	IP) - RIP - I	Existing		
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	4,000							4,000
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *		3,500						3,500
R/W								0
CON		500						500
TOTAL	4,000	4,000	0	0	0	0	0	8,000

Funding Source:	State High	way Operat	ions & Pro	tection Prog	gram (SHO	PP) - Existi	ng	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON		14,900						14,900
TOTAL	0	14,900	0	0	0	0	0	14,900

Funding Source:	Demo - Fe	deral (High	Priority)					
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON		5,600						5,600
TOTAL	0	5,600	0	0	0	0	0	5,600

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

							Date:	11-Jan-07
County	CT District	PPN			EA*		Region/MF	
Sonoma	4	074			0A100K		SON0	10025
Project Title:	US-101 HOV				r Road (North	Phase A)		
* NOTE: PPNO and EA as			ID assigned by R1	TPA/MPO				
Funding Source:	Local Fund		00/00	00/40	40/44	44/40	40/40	T-1-1
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	500							500
PS&E	6,100							6,100
R/W SUP (CT) *	500							500
CON SUP (CT) *	4.000							0
R/W	1,000	40.400						1,000
CON	0.400	16,400		0		•		16,400
TOTAL	8,100	16,400	0	0	0	0	0	24,500
Funding Course								
Funding Source:	Prior	07/00	08/00	00/10	10/11	11/10	10/10	Total
Component	FIIOI	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED) PS&E							<del> </del>	0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON		0		0		•		0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	FIIOI	07/06	06/09	09/10	10/11	11/12	12/13	10tai
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
TOTAL	U	U	U	U	U	U	U	U
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)			00.00	00,10			12,75	0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Additional Funding	Needs (fund	ing needs no	t yet commit	ted)				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13+	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *		-						0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

#### APPENDIX A

#### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

#### **Project Nomination Fact Sheet**

Nominating Age	Fact Sheet Date:	01/11/07		
Contact Person	Guy Preston			
Phone Number	(707) 565-5377	Fax Number	(707) 565-5370	
Email Address	gpreston@sctainfo.org			

County	Caltrans District	PPNO *	EA *	Region/MPO/ TIP ID*		Route / Corridor *	Post Mile Back *	Post Mile Ahead *	
Sonoma	4	0749A	0A100	SONO	10025	101	21.7	29.3	
* NOTE: PPNO & EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO. Route/Corridor & Post Mile Back/Ahead used for State Highway System.									
Legislative Districts	Senate:	ienate: 2 Congressional: 6							
Legislative Districts	Assembly:	1							
Implementing Agency	PA&ED:	Sonoma Cour	ty Transportatio	n Agency	PS&E: SCT.	A			
(by component)	R/W:	Caltrans			CON: Caltr	ans			
Project Title US-101 HOV Lanes - Airport and Operational Improvements (North Phase B)									

Location - Project Limits - Description and Scope of Work (Provide a project location map on a separate sheet and attach to this form)

Santa Rosa - Windsor: US-101 between Steele Lane in Santa Rosa and Windsor River Road in Windsor (North Phase B):

Reduce recurrent congestion on Highway 101; upgrade facility to current standards; improve circulation to Sonoma County Airport

#### Description of Major Project Benefits

Reduces recurrent congestion by improving operations; reduces emissions; improves safety. Reconstruct interchange and provide operational improvements by adding a collector distributor road. Replaces Airport Overcrossing (100% county funded), corrects non-standard ramp geometry, adds SB collector distributor, adds NB aux lane, provides standard shoulders. Sixty-five MPH is posted speed before and after. Operational analysis shows 4-mile backup without collector/distributor. Adds ramp metering. Implementation dependent on adjacent projects.

Expected Source(s) of Additional Funding Necessary to Complete Project - as Identified Under 'Additional Need'

Project Delivery Milestones (month/year):						
Project Study Report (PSR) complete	Dec-01					
Notice of Preparation Document Type: EA/EIR	Apr-03					
Begin Circulation of Draft Environmental Document	Dec-06					
Final Approval of Environmental Document	Dec-07					
Completion of plans, specifications, and estimates	Jul-08					
Right-of-way certfication	Jun-09					
Ready for advertisement	Jul-09					
Construction contract award	Nov-09					
Construction contract acceptance	Dec-11					

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

#### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan**

(dollars in thousands and escalated)
Shaded fields are automatically calculated. Please do not fill these fields.

				Date:	11-Jan-07
County	CT District	PPNO *	EA*	Region/MF	PO/TIP ID *
Sonoma	4	0749A	0A100	SONO	10025
Project Title:	US-101 HOV	Lanes - Airport and Operat	ional Improvements (North Phase B)		

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	ject Cost							Project
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	500	0	0	0	0	0	0	500
PS&E	3,000	0	0	0	0	0	0	3,000
R/W SUP (CT) *	500	0	0	0	0	0	0	500
CON SUP (CT) *	0	0	0	5,000	0	0	0	5,000
R/W	0	4,500	0	0	0	0	0	4,500
CON	0	0	0	37,000	0	0	0	37,000
TOTAL	4,000	4,500	0	42,000	0	0	0	50,500

Corridor Manageme	ent Improvem	ent Account	(CMIA) Progi	ram				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *				5,000				5,000
R/W		4,500						4,500
CON				23,000				23,000
TOTAL	0	4,500	0	28,000	0	0	0	32,500

\* NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:	Sonoma C	ounty Tax I	Measure M	(Sonoma C	County LSP	)		
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	500							500
PS&E	3,000							3,000
R/W SUP (CT) *	500							500
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	4,000	0	0	0	0	0	0	4,000

Funding Source:	Sonoma C	ounty						
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON				14,000				14,000
TOTAL	0	0	0	14,000	0	0	0	14,000

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

							Date:	11-Jan-07
County	CT District	PPN			EA*		Region/MP	
Sonoma	4	074			0A100		SON0	10025
Project Title:		Lanes - Airpor			ments (North I	Phase B)		
* NOTE: PPNO and EA ass	signed by Caltrans.	Region/MPO/TIP	ID assigned by RT	PA/MPO				
Funding Source:				T			T	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
								1
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
								1
Funding Source:		0=/00	22/22	00/10	10/11	4446	1 10/10	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
A 1 100 1 = 10	N 1 22 -							
Additional Funding					40/44	44/40	40/40	Tari
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13+	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON	_	_	_	_	_	_	_	0
TOTAL	0	0	0	0	0	0	0	0

## BASIS OF PROJECT SCOPE, SCHEDULE, AND BENEFITS US 101 HOV LANES – NORTH PHASE A

#### Project Scope

- The scope of this project was developed based on the December 2001 approved Project Study Report and December 2006 Draft project Report. The project scope included the following elements.
  - Widen U.S. 101 to accommodate for 7.6 miles of HOV lanes in each direction from Steele Lane to Windsor River Road
  - Add two southbound auxiliary lanes
  - Extend one northbound auxiliary lane
  - Install ITS elements, including ramp metering
  - Widen in the median only, with no soundwall

#### Project Cost Estimate

- O This project is currently in the final environmental phase. The project estimate was developed based on the following factors.
  - Construction Cost Estimate and Support Costs are in escalated dollars
  - Construction Cost Estimate includes 20% contingency
  - Construction Costs are escalated at 3.5% per year to the middle of the construction period (2009)
  - Construction Engineering and Management Costs are 8% of the Construction Cost Estimate

#### Project Schedule

o This project is currently in the final environmental phase. The project schedule is as follows:

PAED: October 2007
PS&E: May 2007
RTL: March 2008
Begin Construction: June 2008
End Construction: October 2010

#### Project Benefits:

- o The project benefits were derived from the following documents:
  - Approved Project Study Report
  - Approved Draft Project Report and associated technical documents

#### • Transportation 2030 Plan for the San Francisco Bay Area – FINAL – February 2005

RTP (T2030) PROJECT DESCRIPTION	PAGE	ID#
Son 101 – Widen US 101 for HOV lanes (one in each direction) between Steele Lane and Windsor River Road	122	98183

(Copies of these reports are available upon request. See Project Narrative for a detailed description of the project benefits.)

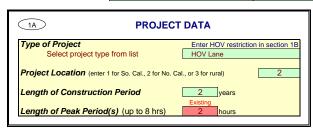
#### Project Contingency Funding

The project cost estimate was developed based on the current scope, with a 20% contingency. Future cost increases are anticipated to be funding by future federal, STIP, and local fund sources.

#### Project Funding Plan

o The proposed funding plan reflects the combination of federal, STIP, SHOPP, local sales tax measure, and CMIA funds. This proposed plan would further the objectives of the CMIA program by ultimately delivering additional improvements and congestion relief earlier than planned. See attached Funding Plan.

District:	4	Project #	19
		EA:	0A100K
PROJECT:	US 101 HOV Lanes - North Phase A (Steele Lane to Windsor)- HOV	PPNO:	0749A



HIGHWAY DESIGN AND TRAF	FIC DAT	A
Highway Design	Existing	New
Number of General Traffic Lanes	4	4
Number of HOV Lanes	0	2
HOV Restriction (2 or 3)	2	
Highway Free-Flow Speed	70	70
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	7.6	7.6
Affected Area	7.6	7.6
Average Daily Traffic  Current	90,000 w/o Project	w/ Project
Base (Year 1)	95,714	95.714
Forecast (Year 20)	150,000	150,000
Average Hourly HOV Traffic (if HOV lanes)	2.400	2.400
Percent Traffic in Weave (if oper. improvement)	,	
Percent Trucks (include RVs, if applicable)	5%	5%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		
	ı	

1C) HIGHWAY ACCID	ENT DATA	
Actual 3-Year Accident Data for Facility		
	Count (No.)	Rate
Fatal Accidents	4	0.01
Injury Accidents	204	0.27
Property Damage Only (PDO) Accidents	387	0.52
Statewide Average for Highway Classifica	tion	
	Existing	New
Accident Rate (per million vehicle-miles)	0.90	0.90
Percent Fatal Accidents	1%	1%
Percent Injury Accidents	37%	37%

	1

rom Project Nomination Fact Sheet:		
Fiscal Year:		
Before 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 After	\$ 11,100,000 \$ 52,200,000 \$ 52,200,000	
TOTAL Escalation Factor	\$ 115,500,000 3.5%	

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project #	21a
		EA:	0A1000
PROJECT:	US 101 HOV Lanes - North Phase B (Airport) - Ramp Metering	PPNO:	0749A

PROJECT DATA		
Type of Project		_
Select project type from list	Ramp Metering	
Project Location (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural)		
Length of Construction Period	2 years	
Length of Peak Period(s) (up to 8 hrs)	Existing hours	

Highway Design	Existing	New
Number of General Traffic Lanes	4	4
Number of HOV Lanes	2	2
HOV Restriction (2 or 3)	2	
Highway Free-Flow Speed	65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	1.0	1.0
Affected Area	1.0	1.0
Average Daily Traffic		
Current	90,000	
	w/o Project	w/ Project
Base (Year 1)	95,714	95,714
Forecast (Year 20)	150,000	150,000
Average Hourly HOV Traffic (if HOV lanes)	2,000	2,000
Percent Traffic in Weave (if oper. improvement)		
Percent Trucks (include RVs, if applicable)	5%	5%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0 0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)	U	U
Metering Strategy (1, 2, 3, or b, ir on-ramp proj.)		
-		

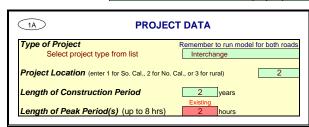
1C HIGHWAY ACCIDENT DATA			
Actual 3-Year Accident Data for Facility			
	Count (No.)	Rate	
Fatal Accidents	4	0.04	
Injury Accidents	204	2.07	
Property Damage Only (PDO) Accidents	387	3.93	
Statewide Average for Highway Classificati	on		
	Existing	New	
Accident Rate (per million vehicle-miles)	0.90	0.90	
Percent Fatal Accidents	1%	1%	
Percent Injury Accidents	37%	37%	
		-	

		l .	
L			

rom Project Nomination Fact Sheet:			
Fiscal Year:			
Before	\$ 200,000		
2007-08	\$ 225,000		
2008-09	\$ 1,050,000		
2009-10 \$ 1,050,000			
2010-11			
2011-12			
2012-13			
After			
TOTAL	\$ 2,525,000		
Escalation Factor	3.5%		

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project #	21b
		EA:	0A1000
PROJECT:	US 101 HOV Lanes - North Phase B (Airport) - IC improvements (Road 1 - 101)	PPNO:	0749A



Highway Design	Existing	New
Number of General Traffic Lanes	4	4
Number of HOV Lanes	2	2
HOV Restriction (2 or 3)	2	
Highway Free-Flow Speed	65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	1.0	1.0
Affected Area	1.0	1.0
Current	90,000 w/o Project	w/ Project
Base (Year 1)	95,714	95,714
Forecast (Year 20)	150,000	150,000
Average Hourly HOV Traffic (if HOV lanes)	2,000	2,000
Percent Traffic in Weave (if oper. improvement)	=0/	
Percent Trucks (include RVs, if applicable)	5%	5%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		

1C HIGHWAY ACCIDENT DATA			
Actual 3-Year Accident Data for Facility			
	Count (No.)	Rate	
Fatal Accidents	4	0.04	
Injury Accidents	204	2.07	
Property Damage Only (PDO) Accidents	387	3.93	
Statewide Average for Highway Classification			
	Existing	New	
Accident Rate (per million vehicle-miles)	0.90	0.90	
Percent Fatal Accidents	1%	1%	
Percent Injury Accidents	37%	37%	
	•		

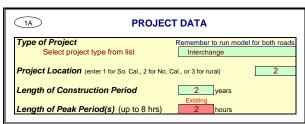
	_		

Fiscal Year:  Before \$ 3,800,000 2007-08 \$ 4,275,000 2008-09 \$ 18,525,000 2009-10 \$ 18,525,000 2010-11 2011-12 2012-13 After  TOTAL \$ 45,125,000	From Project Nomination Fact Sheet:		
2007-08 \$ 4,275,000 2008-09 \$ 18,525,000 2009-10 \$ 18,525,000 2010-11 2011-12 2012-13 After	Fiscal Year:		
2008-09 \$ 18,525,000 2009-10 \$ 18,525,000 2010-11 2011-12 2012-13 After			
2009-10 \$ 18,525,000 2010-11 2011-12 2012-13 After	2007-08	\$ 4,275,000	
2010-11 2011-12 2012-13 After	2008-09	\$ 18,525,000	
2011-12 2012-13 After	2009-10	\$ 18,525,000	
2012-13 After	2010-11		
After	2011-12		
	2012-13		
TOTAL \$ 45,125,000	After		
TOTAL \$ 45,125,000			
	TOTAL	\$ 45,125,000	
Escalation Factor 3.5%	Escalation Factor	3.5%	

Weaving or TMS Safety Improvement 30% reduction

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project #	21b
		EA:	0A1000
PROJECT:	US 101 HOV Lanes - North Phase B (Airport) - IC improvements (Road 2 - Airport)	PPNO:	0749A



1B HIGHWAY DESIGN AND TRAFFIC DATA					
Highway Design	Existing	New			
Number of General Traffic Lanes	2	5			
Number of HOV Lanes					
HOV Restriction (2 or 3)					
· · ·					
		•			
Highway Free-Flow Speed	25	25			
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35			
Length (in miles) Highway Segment	0.3	0.3			
Affected Area	0.3	0.3			
Average Daily Traffic		,			
Current	15,813				
	w/o Project	w/ Project			
Base (Year 1)	16,420	16,420			
Forecast (Year 20)	22,184	22,184			
Average Hourly HOV Traffic (if HOV lanes)		0			
Percent Traffic in Weave (if oper. improvement)					
Percent Trucks (include RVs, if applicable)	9%	9%			
Truck Speed (if passing lane project)					
On-Ramp Volume	Peak	Non-Peak			
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0			
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)					

1C HIGHWAY ACCIDENT DATA					
Actual 3-Year Accident Data for Facility					
	Count (No.)	Rate			
Fatal Accidents		0.01			
Injury Accidents		0.34			
Property Damage Only (PDO) Accidents		0.69			
Statewide Average for Highway Classificati Accident Rate (per million vehicle-miles) Percent Fatal Accidents Percent Injury Accidents	Existing	New			

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

Prepare Model for Second Road

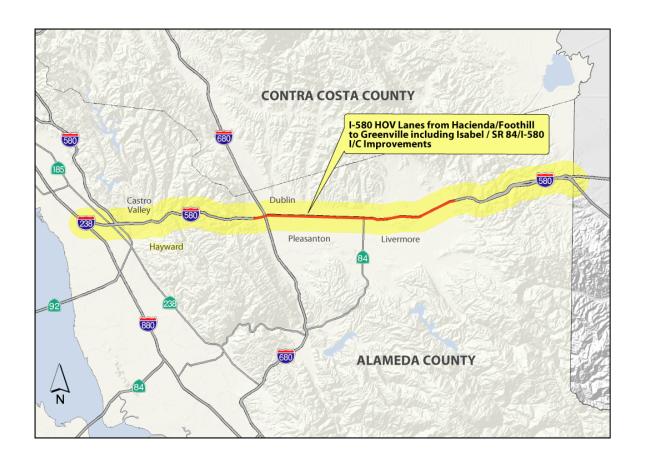
#### TOTAL CMIA PROJECT COSTS (in escalated dollars)

From Project Nomination Fact Sheet:				
Fiscal Year:				
Before	\$ 3,800,000			
2007-08	\$ 4,275,000			
2008-09	\$ 19,950,000			
2009-10	\$ 19,950,000			
2010-11				
2011-12				
2012-13				
After				
TOTAL	\$ 47,975,000			
Escalation Factor	3.5%			

Weaving or TMS Safety Improvement 30% reduction

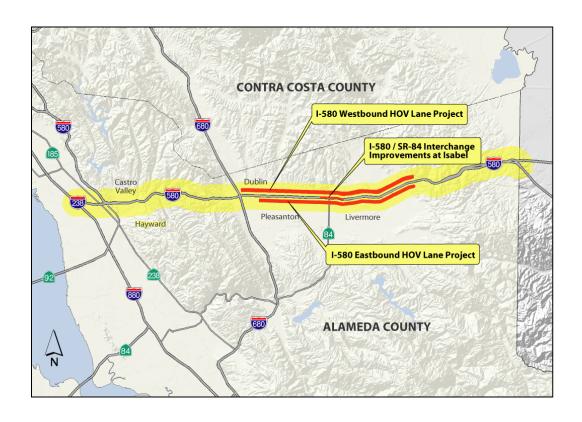
### Metropolitan Transportation Commission Corridor Mobility Improvement Account Program of Projects

#### I-580/I-238 Corridor: Alameda



## **Project Location Map**

# I-580 HOV Lanes in Livermore Valley Including I-580/SR 84 (Isabel) Interchange



#### CMIA PROJECT NARRATIVE

I-580/I-238: 1) Eastbound HOV Lane; 2) Westbound HOV Lane; 3) I-580/SR 84 (Isabel Avenue) Interchange

#### **Travel Corridor Description**

The I-580/I-238 corridor is a 42 mile-long east-west corridor in Alameda County, the second most populous of the San Francisco Bay Area's nine counties. The corridor provides critical inter-regional connectivity between the Bay Area and the Central Valley, terminating at I-5 in San Joaquin County. Within the Bay Area, the corridor provides direct connections to the East Bay's three major north-south freeways: I-880, the northsouth segment of I-580, and I-680. With its connections to the national interstate network, it serves as a major gateway for goods movement into and out of the Bay Area's five seaports, three commercial airports, and four rail freight terminals, as well as a primary route for recreational travelers destined for the Sierras and Southern California. With its connections to the East Bay's major north-south freeways and its location along several urbanized cities in Alameda County, it also serves as a significant regional and interregional commuter route. The I-580 corridor is considered a State lifeline route for emergency relief, a high-emphasis route on the Interregional Road System (IRRS), a priority corridor in the Global Gateways Development Program, a Federal Surface Transportation Assistance Act (STAA) truck route on the national network, and was selected by the California Highway Patrol as a Truck Safety Corridor.

Mass transit is provided by Bay Area Rapid Transit (BART) trains, which run from Castro Valley to Pleasanton; Altamont Commuter Express (ACE) trains, which run from Stockton to San Jose via Livermore and Pleasanton; and local buses operated by Alameda-Contra Costa Transit (AC Transit) and Wheels in the Tri-Valley.

#### **Project Function**

The proposed project would add eastbound and westbound HOV lanes through the most heavily traveled section of the I-580 corridor and construct a new interchange on I-580 at Isabel Avenue/SR-84. The CMIA application for the I-580 corridor consists of three components as reflected in the associated Fact and Funding sheets: Project 1 would add an eastbound HOV lane, extending about 11 miles, between Hacienda Drive in Pleasanton and Greenville Road in Livermore and add eastbound auxiliary lanes between interchanges within those limits from El Charro Road to Vasco Road. Project 2 would construct a 13-mile westbound HOV lane from Foothill Road in Dublin to Greenville Road and add westbound auxiliary lanes between interchanges within those limits from the future Isabel Avenue to First Street. Project 3 would construct a new I-580/ SR 84 interchange at the future Isabel Avenue located between the current Airway and Portola interchanges.

#### **Project Benefits**

#### A. Operations and Safety

The daily traffic volume was 211,000 vehicles per day in 2005, with trucks accounting for about 12 percent of the total traffic. Two segments along the corridor have been in the top five most congested freeway locations in the Bay Area since 2002, experiencing three hour-long weekday morning peak period congestion in the westbound direction and four hour-long weekday afternoon peak period congestion in the eastbound direction. Recent monitoring indicates that travel times through the project area vary between 10 and 30 minutes, depending on direction traveled and peak period. By year 2035, travel times for are expected to increase to be between 15 and 50 minute without the HOV lane projects

The capacity additions proposed for the HOV lane projects, travel times would be expected to decrease travel times by as much as 50 % in the HOV lanes and 35 % in the mixed-flow lanes by year 2035. The HOV lanes would also fill a critical gap in the Bay Area carpool lane network, not only improving traffic operations but also enhancing safety and encouraging motorists to rideshare or use mass transit. Additionally, the person-throughput of the facility would increase due to the delay decreases and the ability of HOV lane eligible vehicles to bypass any congestion that does develop.

The direct connections via the proposed Isabel Avenue interchange would eliminate circuitous movements and standardize on- and off-ramps, thereby reducing congestion and enhancing safety in this project area.

#### B. Air Quality

The nine-county region is part of the San Francisco Bay Area Air Quality Basin. The region currently meets the national attainment standards for Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter ( $PM_{10}$ ), fine Particulate Matter ( $PM_{2.5}$ ), and lead. The area has been designated a marginal nonattainment area for Ozone based on current federal standards. Additionally, the region does not meet the current state standards for Ozone,  $PM_{10}$  and  $PM_{2.5}$ , but is in attainment for the other pollutants listed above. A number of violations of the Ozone air quality standards in the Bay Area are detected at the Livermore monitoring station, owing to the area being downwind of major industrial areas and freeways and being fenced in by the Altamont Pass. By reducing starts, stops, and idling, the project is expected to result in significant reductions in both Ozone precursors and toxic particulate matter that is heavily produced by diesel trucks, which is consistent with the region's air quality attainment goals.

In February, 2005, the Metropolitan Transportation Commission (MTC) adopted the 25-year Regional Transportation Plan (RTP). The transportation air quality conformity analysis of the Plan resulted in a positive conformity finding. This project is included in the current RTP and in the air quality conformity analysis, and is therefore part of a conforming transportation plan.

#### C. Access to Jobs, Housing, Markets, and Commerce

In general, the I-580 corridor is an important conduit between more affordable housing in eastern Contra Costa and San Joaquin Counties and major employment centers in the Tri-Valley, Silicon Valley in the South Bay, and the Peninsula. As described above, it is also

a vital trade corridor connecting the Bay Area to the rest of California and destinations east. By virtue of its potential to decrease existing and future congestion, all of the proposed projects are also expected to facilitate access to jobs, housing, markets, and commerce in and around the Bay Area. In addition, Project 3 would specifically improve access and connectivity for the developing northwesterly portion of Livermore.

#### **Project Risks**

#### A. Project 1: Eastbound HOV Lane from Hacienda to Greenville

The project is currently in the environmental and design phases, with project approval and environmental documentation (PA&ED) and plans, specifications, and estimate (PS&E) both targeted for April 2007. The scope, schedule and cost risks at this time are very low.

## B. <u>Project 2: Westbound HOV Lane from San Ramon/Foothill to Greenville, including I-580/SR 84 (Isabel Avenue) Interchange</u>

The Westbound HOV Lane from San Ramon/Foothill to Greenville project is currently in the planning phase. The schedule assumes "risk design", and that all the work will be done within the existing R/W.

The I-580/SR 84 (Isabel Avenue) Interchange project is currently in the project approval and environmental documentation (PA&ED) stage. The Draft Project Report (DPR) is currently in progress. The Draft Environmental Document (DED) was circulated for public review and the comment period was closed on August 29, 2005. Risks associated with cost and schedule are low.

#### Corridor System Management Plan/Preserving Mobility Gains

Caltrans District 4 and MTC have recently launched a joint effort entitled the Freeway Performance Initiative, which will advance a corridor-based and performance-driven transportation planning process, employing tested system management principles and strategies to maximize the efficiency of the existing transportation infrastructure. I-580 is one of the 12 key corridors identified for analysis and development of a Corridor System Management Plan over the next 18 months.

The corridor planning effort will include ongoing and planned projects in the area, which are expected to preserve mobility gains and other benefits from the three projects, and which will be funded with other sources: interchange modifications at I-680 in Pleasanton; installation of additional TOS elements including communications between traffic operations centers, as part of the ongoing I-580 Transportation Management Plan (TMP)/Advanced Elements project; construction of truck climbing lanes in the Altamont Pass area; widening of Isabel Avenue; safety improvements to reduce grades, flatten curves, and provide truck climbing lanes on Route 84 through the Pigeon Pass area between I-580 and I-680; the ongoing project to develop a strategy for right-of-way reservation for a potential extension of BART to Livermore; and an ongoing project to purchase additional ACE trains. The proposed projects would play a significant role in providing congestion relief, enhanced mobility, improved safety, and stronger connectivity to benefit travelers in the San Francisco Bay Area, consistent with the objectives of the CMIA.

#### CORRIDOR MOBILITY IMPROVEMENT ACCOUNT

#### **Project Nomination Fact Sheet**

Nominating Agenc	y: Alameda County Congestion Management	Agency (AC	CMA) Fact Shee	t Date: 01/11/07
Contact Person	Frank Furger			
Phone Number	(510) 836-2560	Fax Number	(510) 836-2185	
Email Address	ffurger@accma.ca.gov			

County	Caltrans District	PPNO *	EA*	Region/MF	Region/MPO/ TIP ID*		Post Mile Back *	Post Mile Ahead *
Alameda	4	0112A	290811	ALA0	50006	580	R8.29	R18.82
* NOTE: PPNO & EA ass	signed by Cal	trans. Region/M	PO/TIP ID assign	ed by RTPA/MP	O. Route/Corridor	& Post Mile Bad	ck/Ahead used for Stat	e Highway System.
Legislative Districts	Senate:	District 9 &10			Congressional:	District 10 & 1	1	
Legislative Districts	Assembly:	District 15 & 1	8					
Implementing Agency	PA&ED:	ACCMA			PS&E: ACC	MA		
(by component)	R/W:	ACCMA			CON: Caltr	ans		
Project Title	I-580 Eas	tbound HO	V Lane – Had	cienda to Gre	eenville			

Location - Project Limits - Description and Scope of Work (Provide a project location map on a separate sheet and attach to this form)

The project is located on I-580 between the Hacienda Drive interchange (PM R18.82) and the Greenville Road Overhead (PM R8.29). The proposed project would construct an eastbound HOV lane on I-580 from the Hacienda Drive interchange in the City of Pleasanton to the Greenville Road Overhead in the City of Livermore. The project includes the construction of eastbound auxiliary lanes from El Charro Road to Airway Blvd., from Isabel Avenue to North Livermore Avenue, from North Livermore Avenue to First Street and First Street to Vasco Road; and the widening of the existing bridge crossing over Arroyo Las Positas (PM 11.72) to accommodate the auxiliary lane. The project also includes reconstruction of the median to widen the inside paved shoulder and construction of a concrete median barrier, as well as sound walls where identified in the environmental document.

# Description of Major Project Benefits

The project will reduce eastbound peak-period congestion and delay; decrease travel times; encourage use of HOVs and transit; support regional air quality attainment goals, and enhance safety for motorists and Caltrans maintenance workers.

Expected Source(s) of Additional Funding Necessary to Complete Project - as Identified Under 'Additional Need'

Project Delivery Milestones (month/year):						
Project Study Report (PSR) complete	Jun-01					
Notice of Preparation Document Type: ND/FONSI	Dec-01					
Begin Circulation of Draft Environmental Document	Aug-06					
Final Approval of Environmental Document	Apr-07					
Completion of plans, specifications, and estimates	Apr-07					
Right-of-way certfication	Jun-07					
Ready for advertisement	Oct-07					
Construction contract award	Feb-08					
Construction contract acceptance	Apr-10					

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hg/transprog/ and at: http://www.catc.ca.gov/

#### CORRIDOR MOBILITY IMPROVEMENT ACCOUNT **Project Nomination Fact Sheet - Project Cost and Funding Plan**

(dollars in thousands and escalated)
Shaded fields are automatically calculated. Please do not fill these fields.

				<b>Date:</b> 11-J	an-07				
County	CT District	PPNO *	EA*	Region/MPO/TIP	ID *				
Alameda	4	0112A	290811	ALA050006					
Project Title:	Project Title: I-580 Eastbound HOV Lane – Hacienda to Greenville								

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	ject Cost							
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	7,000	2,000	0	0	0	0	0	9,000
PS&E	4,000	1,000	0	0	0	0	0	5,000
R/W SUP (CT) *	0	0	0	0	0	0	0	0
CON SUP (CT) *	0	15,800	0	0	0	0	0	15,800
R/W	0	0	0	0	0	0	0	0
CON	0	123,900	0	0	0	0	0	123,900
TOTAL	11,000	142,700	0	0	0	0	0	153,700

Corridor Manageme	Corridor Management Improvement Account (CMIA) Program											
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total				
E&P (PA&ED)								0				
PS&E		1,000						1,000				
R/W SUP (CT) *								0				
CON SUP (CT) *		15,800						15,800				
R/W								0				
CON		78,900						78,900				
TOTAL	0	95,700	0	0	0	0	0	95,700				

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:	SHOPP							
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON		27,000						27,000
TOTAL	0	27,000	0	0	0	0	0	27,000

Funding Source:	Local Fund	l - Regiona	l Measure 2	2 (RM2)				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	2,000							2,000
PS&E	4,000							4,000
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	6,000	0	0	0	0	0	0	6,000

Funding Source:	TCRP							
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	5,000	2,000						7,000
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON		18,000						18,000
TOTAL	5,000	20,000	0	0	0	0	0	25,000

Shaded fields are automatically calculated. Please do not fill these fields.

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

							Date:	11-Jan-07
County	CT District	PPN			EA*			PO/TIP ID *
Alameda	4	011			290811		ALA0	50006
Project Title:		und HOV Lane						
* NOTE: PPNO and EA as	signed by Caltrans.	Region/MPO/TIP	ID assigned by R1	PA/MPO				
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
		•			•			•
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&È								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	
TOTAL	U	U	U	U	U	0	U	U
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	FIIOI	07/06	06/09	09/10	10/11	11/12	12/13	10tai
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON					_			0
TOTAL	0	0	0	0	0	0	0	0
_								
Funding Source:		•					_	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
								-
Additional Funding	Needs (fund	ing needs no	t yet commit	ted)				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13+	Total
E&P (PA&ED)								0
PS&E							1	0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON							1	0
	0	0	0	0	0	0	0	
TOTAL	0	U	0	0	0	U	U	0

Shaded fields are automatically calculated. Please do not fill these fields.

APPENDIX A CMIA Guidelines

#### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

#### **Project Nomination Fact Sheet**

Nominating Agend	y: Alameda County Congestion Management	Agency (AC	CMA) Fact Sheet Date:	01/11/07
Contact Person	Frank Furger			
Phone Number	(510) 836-2560	Fax Number	(510) 836-2185	
Email Address	ffurger@accma.ca.gov			

Project Information	Caltrans	PPNO *	EA*	Region/MF	PO/ TIP ID*	,	Route / Corridor *	Post Mile Back *	Post Mile Ahead *	
Alameda	4	0112B	290820	ALA050006/ALA990072			580	R8.29	R21.43	
* NOTE: PPNO & EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO. Route/Corridor & Post Mile Back/Ahead used for State Highway System.										
Legislative Districts	Senate:		Congressi	onal: [	District 10 & 11	I				
Legislative Districts	Assembly:	District 15 & 1	8							
Implementing Agency	PA&ED:	Caltrans/ACCI	MA		PS&E:	Caltra	ans/ACCMA			
(by component)	R/W:	Caltrans/ACCI	MA		CON:	Caltra	ans/ACCMA			
I-580 Westbound HOV Lane – Foothill to Greenville (Including Isabel Interchange and TSM										
Project Title	Improve	ments)								

Location - Project Limits - Description and Scope of Work (Provide a project location map on a separate sheet and attach to this form)
The project is located on I-580 between San Ramon Road/Foothill Road (PM R21.43) and the Greenville Road Overhead (PM R8.29). The proposed project would construct a westbound HOV lane from the San Ramon/Foothill interchange in the Cities of Dublin and Pleasanton to the Greenville Road Overhead in the City of Livermore.

The project includes construction of a new interchange at Isabel Avenue (SR 84) and the construction of westbound auxiliary lanes from First Street to North Livermore Avenue; and from North Livermore Avenue to Isabel Avenue. The project also includes construction of a westbound express bus ramp connection from the westbound HOV lane to the Dublin/Pleasanton BART Station. In addition, the proposed project will include installation of components of a Traffic Operations System and Intelligent Transportation System on I-580 within the project limits.

#### Description of Major Project Benefits

The project will reduce westbound peak-period congestion and delay, decrease travel times, reduce the number of accidents, encourage use of HOV's, support regional air quality attainment goals, and enhance safety for motorists and Caltrans maintenance workers.

Because the project will provide direct express bus service access to the Dublin / Pleasanton BART Station, it will encourage the use of alternative transportation modes such as express bus service and BART.

Expected Source(s) of Additional Funding Necessary to Complete Project - as Identified Under 'Additional Need'

Project Delivery Milestones (month/year):					
Project Study Report (PSR) complete	Jan-07				
Notice of Preparation Document Type: ND/FONSI	N/A				
Begin Circulation of Draft Environmental Document	Jan-09				
Final Approval of Environmental Document	Nov-09				
Completion of plans, specifications, and estimates	Dec-09				
Right-of-way certfication	Mar-11				
Ready for advertisement	Apr-11				
Construction contract award	Aug-11				
Construction contract acceptance	Dec-13				

E: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

#### CORRIDOR MOBILITY IMPROVEMENT ACCOUNT **Project Nomination Fact Sheet - Project Cost and Funding Plan**

(dollars in thousands and escalated)
Shaded fields are automatically calculated. Please do not fill these fields.

				<b>Date:</b> 11-Jan-07
County	CT District	PPNO *	EA*	Region/MPO/TIP ID *
Alameda	4	0112B	290820	ALA050006/ALA990072
Project Title:	I-580 Westbo	und HOV Lane – Foothill to	Greenville (Including Isabel Interchange	and TSM Improvements)

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	ject Cost							Project
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	14,300	3,500	0	0	0	0	0	17,800
PS&E	15,000	8,500	0	0	0	0	0	23,500
R/W SUP (CT) *	0	0	0	0	0	0	0	0
CON SUP (CT) *	0	0	0	0	0	0	0	0
R/W	0	23,900	0	0	0	15,600	0	39,500
CON	0	0	0	0	0	217,600	0	217,600
TOTAL	29,300	35,900	0	0	0	233,200	0	298,400

Corridor Management Improvement Account (CMIA) Program								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)		3,300						3,300
PS&E		7,700						7,700
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W		1,000				15,600		16,600
CON						170,800		170,800
TOTAL	0	12,000	0	0	0	186,400	0	198,400

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:	SAFETEA	(City of Live	ermore)					
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W		1,600						1,600
CON						9,700		9,700
TOTAL	0	1,600	0	0	0	9,700	0	11,300

Funding Source:	Local Fund	(City of Liv	/ermore)					
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	14,300							14,300
PS&E	15,000							15,000
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W		19,300						19,300
CON								0
TOTAL	29,300	19,300	0	0	0	0	0	48,600

Funding Source:	Local Fund	l - Regional	Measure 2	2 (RM2)				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)		200						200
PS&E		800						800
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W		2,000						2,000
CON						12,000		12,000
TOTAL	0	3,000	0	0	0	12,000	0	15,000

Shaded fields are automatically calculated. Please do not fill these fields.

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

			,		, do not mi the		Date:	11-Jan-07
County	CT District	PPN	IO *		EA*		Region/MP	
Alameda	4	011	2B		290820		ALA050006/	ALA990072
Project Title:	I-580 Westbox	und HOV Lan	e – Foothill to	Greenville (In	cluding Isabe	I Interchange	and TSM Impr	ovements)
* NOTE: PPNO and EA as				ΓPA/MPO				
<b>Funding Source:</b>	Local Coun	ity Fund - N	/leasure B					
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&È								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W	+							0
CON						25,100		25,100
TOTAL	0	0	0	0	0	25,100	0	
TOTAL	U	U	U	U	U	25,100	U	25,100
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	1				22.5.5		,	0
PS&E	† †							0
R/W SUP (CT) *								0
CON SUP (CT) *								
R/W	+							0
	+							0
CON		_	_	_	_			0
TOTAL	0	0	0	0	0	0	0	0
Funding Course								1
Funding Source:	Deine	07/00	00/00	00/40	40/44	44/40	40/40	Tatal
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
								1
Funding Source:	I Determine	07/00	00/00	00/40	40/44	44/40	40/40	T-1-1
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W	<u>1                                    </u>							0
CON						-		0
TOTAL	0	0	0	0	0	0	0	0
Additional Funding	· · · · ·							
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13+	Total
E&P (PA&ED)	1							0
PS&E								0
R/W SUP (CT) *	1 7							0
CON SUP (CT) *								0
R/W	1							0
CON	1							0
TOTAL	0	0	0	0	0	0	0	0

Shaded fields are automatically calculated. Please do not fill these fields.

# I-580 Corridor Comparison of Existing to Proposal Funding

	Current	Funding	Proposed Funding (Millions of \$)				Comments	
Fund Source	EAST BOUND	WEST BOUND	EAST BOUND	WEST BOUND	580/680 IC	TRUCK CLIMBING LANE	CORRIDOR PLANNING & TMP	
STIP (Existing)	17.7	0	0	0	0	17.7		
STIP (Future)								
TCRP	25	0	25	0	0	0	0	
Regional Measure 2	35	30	6	15	30	0	14	\$14M of RM2 already expended
CMIA	0	0	95.7	198.4	0	0	0	
SAFETEA LU	0	15.6	0	0	0	0	0	
SHOPP	0	0	27	0	0	0	0	FUTURE
Local						41.15		
Trade Corridor	0	0	0	0	0	41.15		
ACTIA (Measure B)		25.1		25.1				
City		59.9		59.9				
Total Funding	77.7	130.6	153.7	298.4	30	100	14	
Total Project Cost			153.7	298.4	398.4	100	14	

#### Notes

- 1. Caltrans proposal does not include I-580/SR 84 interchange (\$ 68 M for WB)
- 2. Caltrans proposal does not include additional pavements for anticipated HOT lane conversion (\$10 M for EB; \$10 M for WB)
- 3. Caltrans proposal does not include replacement of 1st Street Over crossing Structure (\$9.3 M for WB)
- 4. Caltrans proposal does not include minor coordination work with local interchange project (\$7.3 M for EB))
- 5. Caltrans proposal assumes the use of SAFETEA funds; ACCMA proposal reserves these funds for other corridor improvements and project developments (\$6 M for EB; \$9.6 M for WB)

Consistent with the adopted CMIA Guidelines, the region proposes a funding solution that further the goals of the CMIA program for the 580 Corridor: leverage federal, state, regional, and local funds as part of a comprehensive corridor investment strategy.

# BASIS OF PROJECT SCOPE, COST, SCHEDULE, AND BENEFITS I-580 EAST BOUND HOV LANE

### Project Scope

The scope of this project was developed based on the January 2001 approved Project Study Report, August 2006 Draft Project Report, and approved 2006 Roadway Rehabilitation PSSR. The project scope does not include HOT lane elements, which is included by the Alameda County Congestion Management Agency's (ACCMA) submittal.

#### Project Cost Estimate

- This project is currently in the final environmental phase and is being designed at risk.
   The PS&E is 95% complete. The project estimate was developed based on the following factors.
  - Using 95% Engineers PS&E Construction Cost Estimate
  - Construction Cost Estimate and Support Costs are in 2008 dollars (Costs already expended are in 2006 dollars)
  - Construction Cost Estimate includes 5% contingency
  - Construction period is from 2008 to 2010
  - Construction Costs are escalated at 7% per year (for one year) to the middle of the construction period
  - Construction Engineering and Management Costs are 15% of the Construction Cost Estimate
  - Construction Engineering and Management Costs are escalated at 3.5% per year to the middle of the construction period (From 2008 to 2009)
  - CMA Oversight and Support Costs are estimated at 1.0% of the Construction Cost Estimate and are included in project development costs
  - Cost estimate does not include HOT elements (\$10M for additional 8' of pavement) that is included in the ACCMA's submittal

#### Project Schedule

O This project is currently in the final environmental phase. It is also being designed at risk. The PS&E is 95% complete. The project schedule is based on the current project status and potential risks.

#### Project Benefits:

- o The project benefits were derived from the following documents:
- o Approved Project Study Report
- o Approved Draft Project Report and associated technical documents
- o Approved Draft Environmental Document and associated technical documents

# o Transportation 2030 Plan for the San Francisco Bay Area – FINAL – February 2005

RTP (T2030) Project Description	Page	ID#
Ala 580 – I-580 Corridor Improvements (widen I-580 in both directions for HOV and auxiliary lanes from Tassajara Road to Greenville road, construct HOV direct-connector from westbound I-580 to southbound I-680, construct eastbound truck climbing lane from Flynn Road to Greenville Road (Altamont Summit), and acquire express buses)	88	22013 Partial EB/WB HOV

(Copies of these reports are available upon request. See Project Narrative for a detailed description of the project benefits)

# Project Contingency Funding

The project cost estimate was developed with a 5% construction contingency based on an updated 95% PS&E cost estimate, a well defined scope, and a 7% construction cost escalation rate extended to mid year of construction. Should the project cost increases, funding for the increase will be secured from future STIP or local funding sources.

# Project Funding Plan

O The proposed project funding plan includes replacement of existing STIP and local funding with CMIA funding in order to maximize and advance delivery of critical improvements in the corridor. This proposed plan would further the objectives of the CMIA program by ultimately delivering additional improvements and congestion relief earlier than planned. See attached Funding Plan.

# BASIS OF PROJECT SCOPE, COST, SCHEDULE, AND BENEFITS 1-580 WESTBOUND HOV LANE

#### Project Scope

o The scope of this project was developed based information from the 2001 Approved Project Study Report and ongoing Supplemental Project Study Report. The Supplemental Project Study Report is scheduled to be completed in early January 2007. The project scope does not include scope for future HOT lane implementation (\$19M) which is included in the Alameda County Congestion Management Agency's (ACCMA) submittal

#### Project Cost Estimate

- o This project is currently in the planning phase. The cost estimate was developed based on the following factors.
  - Design exceptions will be approved at First Street I/C to avoid replacing First Street bridge
  - Using PSR Level Construction Cost Estimate
  - Construction Cost Estimate and Support Costs are in 2008 dollars
  - Construction Cost Estimate includes 15% contingency
  - Project will be designed at risk with concurrent PAED and PS&E efforts
  - Construction period is from 2011 to 2013
  - Construction Costs are escalated at 7% per year to the middle of the construction period
  - PA/ED Cost is assumed to be \$3 million based on the PA/ED costs for the eastbound HOV lane project
  - PS&E Cost is assumed to be \$5.2 million based on the PS&E costs for the eastbound HOV lane project
  - Construction Engineering and Management Costs are 15% of the Construction Cost Estimate
  - Construction Engineering and Management Costs are escalated at 3.5% per year to the middle of the construction period
  - CMA Oversight and Support Costs are estimated at 1.0% of the Construction Cost Estimate and included in project development costs
  - Assumes minor right of way impacts
  - Assumes receiving design exception approval on narrow shoulders adjacent to Westerly segment of Dublin Sportspark
  - Cost does not include scope for future HOT lane implementation (\$19M for 8' of additional pavement width and one structure replacement) which is included in the ACCMA's submittal.

# Project Schedule

This project is currently in the planning stage. The project scheduled is based on a risk design approach in which the environmental clearance effort and final design effort will be undertaken concurrently. The project schedule assumes a 26 months to clear the environmental document (ND/FONSI) and 16 months to acquire right of way and utility relocations. The schedule assumes minor right of way impacts and no condemnation.

### Project Benefits:

- o The project benefits were derived from the following documents:
  - Approved Project Study Report
  - Ongoing Supplemental Project Study Report studies
- **Transportation 2030 Plan** for the San Francisco Bay Area FINAL February 2005 Appendix 1:

RTP (T2030) Project Description	Page	ID#
Ala 580 – I-580 Corridor Improvements (widen I-580 in both directions for HOV and auxiliary lanes from Tassajara Road to Greenville road, construct HOV direct-connector from westbound I-580 to southbound I-680, construct eastbound truck climbing lane from Flynn Road to Greenville Road (Altamont Summit), and acquire express buses)		22013 Partial EB/WB HOV

(Copies of these reports are available upon request. See Project Narrative for a detailed description of the project benefits)

## Project Contingency Funding

The project cost estimate was developed based on a 15% construction contingency and a 7% construction cost escalation rate extended to mid year of construction. Should the project cost increases, funding for the increase will be secured from future STIP or local funding sources.

#### Project Funding Plan

o The proposed project funding plan includes replacement of local funding with CMIA funding in order to maximize and advance delivery of critical improvements in the corridor. This proposed plan would further the objectives of the CMIA program by ultimately delivering additional improvements and congestion relief earlier than planned. See attached Funding Plan.

Type of Project	PROJECT DATA	1C	HIGHWAY ACCIDENT DATA
PROJECT:	I-580 EB Interim HOV Lane: Hacienda to Gre	eenville	PPNO:
District:	4		Project # EA:

HOV Lane

2 years

1B HIGHWAY DESIGN AND TRA	FFIC DAT	ΓΑ
Highway Design	Existing	New
Number of General Traffic Lanes	4	4
Number of HOV Lanes	0	1
HOV Restriction (2 or 3)	2	
Highway Free-Flow Speed	70	70
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	11.3	11.3
Affected Area	11.3	11.3
Average Daily Traffic		1
Current	90,000	
	w/o Project	w/ Project
Base (Year 1)	93,333	93,333
Forecast (Year 20)	125,000	125,000
Average Hourly HOV Traffic (if HOV lanes)	1,500	1,500
Percent Traffic in Weave (if oper. improvement)	400/	400/
Percent Trucks (include RVs, if applicable)	12%	12%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)		0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)	3	
mooning offacegy (1, 2, 0, of 5, if off-famp proj.)		

Select project type from list

Length of Peak Period(s) (up to 8 hrs)

Length of Construction Period

Project Location (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural)

1C HIGHWAY ACCIDENT DATA		
Actual 3-Year Accident Data for Facility		
	Count (No.)	Rate
Fatal Accidents	3	0.00
Injury Accidents	145	0.13
Property Damage Only (PDO) Accidents	311	0.28
Statewide Average for Highway Classificat	tion Existing	New
Accident Rate (per million vehicle-miles)	1.14	0.91
Percent Fatal Accidents	1.0%	1.0%
	32%	32%

290811

	$\supset$		
,			

#### TOTAL CMIA PROJECT COSTS (in escalated dollars)

rom Project Nomination Fact Sheet:		
Fiscal Yea	r:	
Before 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 After	\$ 70,350,000	
TOTAL Escalation Factor	\$ 153,700,000 3.5%	

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project #	8a
		EA:	290820
PROJECT:	I-580 WB Interim HOV Lane: Greenville to Foothill	PPNO:	

PROJECT DATA	
Type of Project	Enter HOV restriction in section 1B
Select project type from list	HOV Lane
Project Location (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural)	
Length of Construction Period	2 years
	Existing
Length of Peak Period(s) (up to 8 hrs)	4 hours

Highway Design	Existing	New
Number of General Traffic Lanes	4	4
Number of HOV Lanes	0	1
HOV Restriction (2 or 3)	2	
Highway Free-Flow Speed	70	70
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	13.40	13.40
Affected Area	13.40	13.40
Average Daily Traffic  Current	00.000	1
Current	90,000 w/o Project	w/ Project
Base (Year 1)	93,333	93,333
Forecast (Year 20)	125.000	125,000
Average Hourly HOV Traffic (if HOV lanes)	1,500	1,500
Percent Traffic in Weave (if oper. improvement)	1,000	.,,
Percent Trucks (include RVs, if applicable)	12%	12%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.) Metering Strategy (1, 2, 3, or D, if on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, ii on-ramp proj.)		
<del></del>		

1C HIGHWAY ACCIDENT DATA		
Actual 3-Year Accident Data for Facility		
	Count (No.)	Rate
Fatal Accidents	6	0.00
Injury Accidents	425	0.32
Property Damage Only (PDO) Accidents	886	0.67
Statewide Average for Highway Classificate	ion	
	Existing	New
Accident Rate (per million vehicle-miles)	1.14	0.91
Percent Fatal Accidents	1.0%	1.0%
Percent Injury Accidents	32%	32%

$\bigcirc$		
	.1	
		1

#### TOTAL CMIA PROJECT COSTS (in escalated dollars)

rom Project Nomination Fact Sheet:		
Fiscal Yea	r:	
Before 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 After	\$ 13,100,000 \$ 66,150,000 \$ 66,150,000	
TOTAL Escalation Factor	\$ 145,400,000 3.5%	

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project # EA:	8d3
PROJECT:	I-580 WB Interim HOV Lane: Greenville to Foothill; includes HOV, aux lanes. TSM, bus ramp, Isabel IC - Isabel IC	PPNO:	

PROJECT DATA	
Type of Project	Remember to run model for both roads
Select project type from list	Interchange
Project Location (enter 1 for So. Cal., 2 for No.	Cal., or 3 for rural)
Length of Construction Period	2 years
	Existing
Length of Peak Period(s) (up to 8 hrs)	4 hours

Number of General Traffic Lanes   4   Number of HOV Lanes   0   1   1   1   1   1   1   1   1   1	Perental Traffic Lanes	1B HIGHWAY DESIGN AND TRA	FFIC DAT	ГА
Number of HOV Lanes	DV Lanes	Highway Design	Existing	New
HoV Restriction (2 or 3)   2	Correct	Number of General Traffic Lanes	4	4
Highway Free-Flow Speed Ramp Design Speed (if aux. lane/off-ramp proj.) Length (in miles) Highway Segment Affected Area  Average Daily Traffic Current Base (Year 1) Forecast (Year 20) 125,000 12 Average Hourly HOV Traffic (if HOV lanes) Percent Traffic in Weave (if oper. improvement) Percent Trucks (include RVs, if applicable) 12% 1 Truck Speed (if passing lane project)	e-Flow Speed 70 70 Speed (if aux. lane/off-ramp proj.) 35 35 (es) Highway Segment 4.5 4.5 Affected Area 4.5 4.5  Flic Current 90,000 wo Project W Project 93,333 93,333 Forecast (Year 20) 125,000 125,000  DV Traffic (if HOV lanes) 1,500 1,500 Weave (if oper. improvement) 120de RVs, if applicable) 12% 12% 12% 12% 12% 12% 12% 12% 12% 12%	Number of HOV Lanes		0
Ramp Design Speed (if aux. lane/off-ramp proj.)   35   4.5	Speed (if aux. lane/off-ramp proj.)   35   35	HOV Restriction (2 or 3)	2	
Ramp Design Speed (if aux. lane/off-ramp proj.)   35   4.5	Speed (if aux. lane/off-ramp proj.)   35   35			
Ramp Design Speed (if aux. lane/off-ramp proj.)   35   4.5	Speed (if aux. lane/off-ramp proj.)   35   35	Highway Free-Flow Speed	70	70
Length (in miles)   Highway Segment   4.5	Highway Segment   4.5   4.5     Affected Area   4.5     Af			
Affected Area 4.5  Average Daily Traffic  Current  Base (Year 1) Forecast (Year 20)  Average Hourly HOV Traffic (if HOV lanes)  Percent Traffic in Weave (if oper. improvement)  Percent Trucks (include RVs, if applicable)  12%  12%  127  128  129  129  127  128  129  129  120  120  120  120  120  120	Affected Area 4.5 4.5  Affice Current 90,000 w/o Project w/ Project Base (Year 1) 93,333 93,333 Forecast (Year 20) 125,000 125,000  OV Traffic (if HOV lanes) 1,500 1,500  Weave (if oper. improvement) clude RVs, if applicable) 12% 12% sing lane project)  Peak Non-Peak  Volume (if aux. lane/on-ramp proj.) 0 0			
Current   90,000   w/o Project   w/ 93,333   93   93   93   93   93   93	Current         90,000 w/o Project         w/ Project           Base (Year 1)         93,333         93,333           Forecast (Year 20)         125,000         125,000           DV Traffic (if HOV lanes)         1,500         1,500           Weave (if oper. improvement) clude RVs, if applicable)         12%         12%           sing lane project)         Peak         Non-Peak           Volume (if aux. lane/on-ramp proj.)         0         0			
Base (Year 1)   93,333   93   93   93   93   93   93	Base (Year 1)   93,333   93,333   Forecast (Year 20)   125,000			)
Forecast (Year 20) 125,000 12  Average Hourly HOV Traffic (if HOV lanes) 1,500 1  Percent Traffic in Weave (if oper. improvement)  Percent Trucks (include RVs, if applicable) 12% 1  Truck Speed (if passing lane project)	Forecast (Year 20)   125,000   125,000	D (V 4)		
Average Hourly HOV Traffic (if HOV lanes) 1,500 1 Percent Traffic in Weave (if oper. improvement) Percent Trucks (include RVs, if applicable) 12% 1 Truck Speed (if passing lane project)	OV Traffic (if HOV lanes)         1,500         1,500           Weave (if oper. improvement) clude RVs, if applicable)         12%         12%           sing lane project)         Peak         Non-Peak           Volume (if aux. lane/on-ramp proj.)         0         0			
Percent Traffic in Weave (if oper. improvement) Percent Trucks (include RVs, if applicable)  12%  17ruck Speed (if passing lane project)	Weave (if oper. improvement)         12%           clude RVs, if applicable)         12%           sing lane project)         Peak           Non-Peak           Volume (if aux. lane/on-ramp proj.)         0			
Percent Trucks (include RVs, if applicable) 12% 1 Truck Speed (if passing lane project) 12%	clude RVs, if applicable) 12% 12% sing lane project) Peak Non-Peak Volume (if aux. lane/on-ramp proj.) 0 0		1,500	1,500
Truck Speed (if passing lane project)	sing lane project)  Peak Non-Peak Volume (if aux. lane/on-ramp proj.)  0 0		12%	12%
	Volume (if aux. lane/on-ramp proj.) 0 0		1270	1270
	Volume (if aux. lane/on-ramp proj.) 0 0	The trace of the passing rand projecty		
On-Ramp Volume Peak No		On-Ramp Volume	Peak	Non-Peak
	tegy (1, 2, 3, or D, if on-ramp proj.)		0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		

1C HIGHWAY ACCIDEN	1C HIGHWAY ACCIDENT DATA										
Actual 3-Year Accident Data for Facility											
	Count (No.)	Rate									
Fatal Accidents	6	0.01									
Injury Accidents	425	0.96									
Property Damage Only (PDO) Accidents	886	2.00									
	•	•									
Statewide Average for Highway Classification											
	Existing	New									
Accident Rate (per million vehicle-miles)	1.14	0.91									
Percent Fatal Accidents	1.0%	1.0%									
Percent Injury Accidents	32%	32%									

· · · · · · · · · · · · · · · · · · ·		
		1
	1	

#### TOTAL CMIA PROJECT COSTS (in escalated dollars)

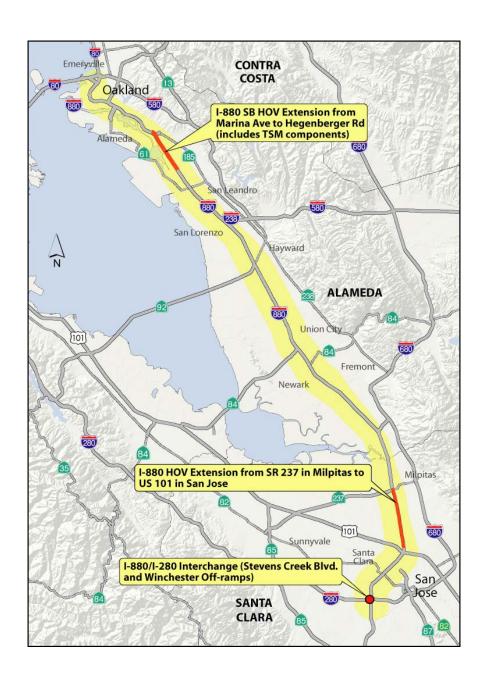
From Project Nomination Fa	act	Sheet:	
Fiscal Yea	r:		
Before	\$	-	
2007-08	\$	-	
2008-09	\$	50,200,000	
2009-10	\$	51,400,000	
2010-11	\$	51,400,000	
2011-12	\$	-	
2012-13			
After			
			•
TOTAL	\$	153,000,000	
Escalation Factor		3.5%	
			•

Up to 10 mph speed improvement, up to maximum speed, input into Model Inputs for with project non-HOV speed to reflect impact of improvements

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

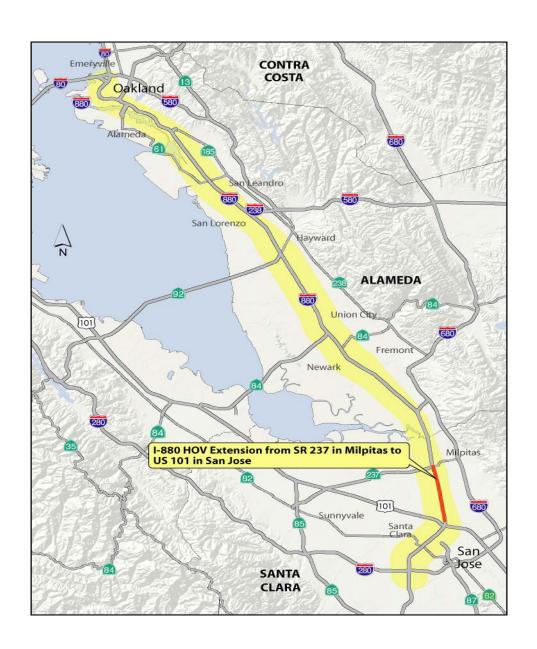
# Metropolitan Transportation Commission Corridor Mobility Improvement Account Program of Projects

# I-880 Corridor: Alameda/Santa Clara



# **Project Location Map**

# I-880 HOV Extension: From State Route 237 in Milpitas to US-101 in San Jose



#### CMIA PROJECT NARRATIVE

I-880 South Corridor in Santa Clara County: HOV Extension from SR 237 to US 101

# **Travel Corridor Description**

Interstate 880 is a major local and regional commute corridor, centrally located within the Bay Area, and is also a trade corridor of national significance. It is a strategic route providing connectivity between densely populated residential areas and many major commercial and industrial centers. The corridor includes a freeway network (with I-880/I-580 and I-880/US 101) running north-south, and freeway connectors running east-west including I-980, SR 238, and I-280), major arterials which absorb diversion from the freeway networks, and a transit network which includes the Bay Area Rapid Transit (BART) system, VTA and multiple bus transit lines. Consequently, the efficient operation of I-880 is of critical economic importance to the region and the State.

The boundaries of the I-880 corridor are between the cities of Oakland and San Jose, with I-580 as the northern boundary and I-880 as the southern boundary, for a distance of about 45 miles or 300+ lane miles. The corridor extends from the Bay Bridge to I-280. This is a logical segment of the corridor as it matches the existing institutional agreements in place for the corridor management plan.

Within the 45-mile length of the I-880 corridor, the freeway is primarily an eight-lane facility between I-980 and SR 237 and a six-lane highway between SR 237 and I-280, with numerous auxiliary lanes between major interchanges. HOV lanes are currently in place for about half (20 HOV miles) of the length of the corridor, extending between SR 238 and Mission Boulevard and between the I-880/SR 237 junction to Dixon Landing Road. Transportation Management Systems (TMS) have been deployed in the majority of the corridor, including: 1) ramp metering and HOV bypass lanes at meters; 2) incident and emergency management systems; 3) changeable message signs on freeways and arterials; and 4) coordinated traffic signal systems on all major arterials. Public transit services paralleling the freeway are also widely available, including BART rail, AC Transit and VTA bus service.

Traffic along this north-south route has continued to increase over the last twenty years as more commuters travel to and from the Silicon Valley, primarily the "Golden Triangle" area bounded by SR 237, Route 101 and I-880. Increases in traffic volumes over the past 30 years are well documented from the Tri Valley area and the Central Valley in the north and the San Jose area to the south. I-880 is identified as a "gateway of regional significance" in the 1998 Interregional Transportation Strategic Plan (ITSP), particularly to pacific trade.

### **Project Function**

The project will widen I-880 to add High Occupancy Vehicle (HOV) lanes in each direction between SR 237 and US 101, filling an existing HOV lane gap, increasing highway capacity and reducing congestion on I-880. It will also extend, by 4 miles, the

HOV system that connects northern Santa Clara County to Alameda County, a distance of about 20 miles. Finally, it will improve connectivity between I-880 and US 101, two critical elements of Santa Clara County's transportation network.

## **Project Benefits**

## A. Operations and Safety

The increased capacity, accompanied by strategic Intelligent Transportation System (ITS) deployment within and beyond the projects limits, will bring with it measurable benefits in terms of connectivity, mobility, safety, and access.

As noted above, the project represents a 20 percent increase in the length of the HOV system along I-880. This extension is an important step in the implementation of the Metropolitan Transportation Commission's (MTC's) 1997 High-Occupancy Vehicle Lane Master Plan Update for the San Francisco Bay Area. The project will also augment the Silicon Valley Smart Corridor (SVSC) ITS established along SR 17 and I-880 corridor from Los Gatos to Milpitas. The program is designated to collect and integrate real-time data with a variety of traffic management systems along the route, linking regional and local traffic operations centers.

With respect to mobility benefits, traffic volumes are projected to exceed current freeway capacity by 35 to 45 percent at bottleneck locations with the project area within the next 20 years. Traffic analyses indicate that the project will result in a significant overall reduction in vehicle hours of delay and in specific peak hour travel timesavings. More than 65 million vehicle hours of delay are expected to be saved over the 20-year life of the project, a reduction of more than 9,000 vehicle hours per day. During peak hour travel, this could mean a savings of 5 to 10 minutes over the 4.3-mile project segment.

Enhanced safety will be an additional benefit of the project. Congestion has been identified as the primary cause of accidents in the project area, with 68 percent of accidents classified as rear end collisions. The increased capacity provided by the HOV lanes is expected to result in up to a 9.7 percent reduction in injury accidents and a 26.3 percent reduction in the total number of collisions, based on statewide averages for comparable facilities.

### B. Air Quality

The nine-county region is part of the San Francisco Bay Area Air Quality Basin. The region currently meets the national attainment standards for Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter ( $PM_{10}$ ), fine Particulate Matter ( $PM_{2.5}$ ), and lead. The area has been designated a marginal nonattainment area for Ozone based on current federal standards. Additionally, the region does not meet the current state standards for Ozone,  $PM_{10}$  and  $PM_{2.5}$ , but is in attainment for the other pollutants listed above. The projected reductions in daily vehicle hours of delay from this project will have a beneficial effect on air quality, as air pollutant emission reductions are realized from increased travel times and speeds.

In February 2005, the MTC adopted the 25-year Regional Transportation Plan (RTP). The transportation air quality conformity analysis of the Plan resulted in a positive conformity finding. This project is included in the current RTP and in the air quality conformity analysis, and is therefore part of a conforming transportation plan.

# C. Access to Jobs, Housing, Markets and Commerce

A final benefit will be improved access. With a current Average Daily Traffic (ADT) estimate of 205,000 vehicles, I-880 is the central approach to Santa Clara County from the north. Access to jobs, housing, and to the San Jose Mineta International Airport will all be positively impacted by the increased capacity and improved operations.

### **Project Risks**

Risks associated with the project stem primarily from two sources: first, the project is still in the PA&ED phase; and second, the project will require considerable right of way acquisition. Consequently, many factors could affect cost and schedule. To mitigate this risk, current cost and schedule assumptions are conservative and include significant contingencies. VTA is currently conducting a value analysis study to determine if right-of-way needs can be reduced.

# **Corridor System Management Plan / Preserving Mobility Gains**

Caltrans District 4 and the Metropolitan Transportation Commission have launched the region-wide Freeway Performance Initiative. The intent is to advance a corridor based and performance driven transportation planning process, employing tested System Management principles and strategies to maximize the efficiency of the existing transportation infrastructure. The I-880 South Corridor is one of the 12 "Key Corridors" identified for analysis and development of a Corridor System Management Plan over the next 18 months.

Over the past several years, VTA has adopted a corridor management approach to planning and project development. This has been manifested in critical corridor-wide studies that examine not just need and impact within the project limits, but the more comprehensive interactions throughout the corridor. These studies propose solutions that work to the benefit of the corridor as a whole. As part of the CMIA process, VTA is reviewing the effects and lessons learned through this process with the intent of developing this approach into a formal corridor management plan.

Examples of the areas that will be addressed in the corridor management plan include the following:

- Continuation of the corridor study approach to assess corridor wide opportunities and impacts;
- Potential for the use of High Occupancy Toll (HOT) lanes or other means of congestion pricing to preserve the gains derived from improved capacity and operations;
- Continued enhancement and extension of ITS elements for improved operations.

#### CORRIDOR MOBILITY IMPROVEMENT ACCOUNT

#### **Project Nomination Fact Sheet**

Nominating Agenc	y: Santa Clara Valley Transportation Author	ity (VTA)	Fact Sheet Date:	01/11/07			
Contact Person	John Ristow - Deputy Director, Programming & Project De	lohn Ristow - Deputy Director, Programming & Project Development					
Phone Number	(408) 321-5713	Fax Number	(408) 321-5723				
Email Address	John.Ristow@vta.org			•			

County	Caltrans District	PPNO *	EA *	Region/MF	O/TIP II	<b>D</b> *	Route / Corridor *	Post Mile Back *	Post Mile Ahead *	
Santa Clara	4		219-29830K				880	4.4	8.7	
* NOTE: PPNO & EA as:	signed by Cal	trans. Region/M	IPO/TIP ID assign	ed by RTPA/MP0	D. Route/0	Corridor	& Post Mile Bad	k/Ahead used for State	e Highway System.	
Legislative Districts	Senate: 10,13				Congres	sional:	15,16			
Legislative Districts	Assembly:	20,22,24								
Implementing Agency	PA&ED:	VTA		<u>.</u>	PS&E:	VTA	<u>.</u>			
(by component)	R/W:	VTA			CON:	CON: VTA				
Project Title	L880 HO	V Evtension	n (SR-237 to l	IS-101)						

Location - Project Limits - Description and Scope of Work (Provide a project location map on a separate sheet and attach to this form)

Location / Project Limits: On I-880 in Santa Clara County, between Old Bayshore Highway in the City of San Jose and Route 237 in the City of Milpitas. (4.3 mile segment)

Scope: Widen the freeway to add an HOV lane in each direction.

#### Description of Major Project Benefits

- Relieve congestion of I-880 corridor from SR 237 to US 101
- Enhance operational safety along the I-880 corridor
- Provide increased capacity to improve mobility
- Improve connectivity of Interregional System
- Continue an HOV system that extends over 20 miles northward to the vicinity of San Leandro and Hayward in Alameda County, consistent with MTC's 1997 HOV Lane Master Plan Update
- Improve ITS deployment along the Highway 17 and I-880 Corridor from Los Gatos to Milpitas
- Enhance movement of goods

## Expected Source(s) of Additional Funding Necessary to Complete Project - as Identified Under 'Additional Need'

#### Project Delivery Milestones (month/year): Project Study Report (PSR) complete May-02 Notice of Preparation Document Type: Jul-07 Begin Circulation of Draft Environmental Document Sep-08 Final Approval of Environmental Document Jun-09 Completion of plans, specifications, and estimates Feb-11 Right-of-way certfication Mar-11 Ready for advertisement Apr-11 Construction contract award Aug-11 Construction contract acceptance Sep-13

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

				Date:	11-Jan-07
County	CT District	PPNO *	EA*	Region/MP	PO/TIP ID *
Santa Clara	4	0	219-29830K	(	0
Project Title:	I-880 HOV Ex	ktension (SR-237 to US-101	1)		

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	ject Cost							Project
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	0	6,100	0	0	0	0	0	6,100
PS&E	0	0	6,800	0	0	0	0	6,800
R/W SUP (CT) *	0	0	0	0	0	0	0	0
CON SUP (CT) *	0	0	0	0	0	0	0	0
R/W	0	0	58,200	0	0	0	0	58,200
CON	0	0	0	0	71,600	0	0	71,600
TOTAL	0	6,100	65,000	0	71,600	0	0	142,700

Corridor Manageme	ent Improvem	ent Account	(CMIA) Progi	ram				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E			6,800					6,800
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W			58,200					58,200
CON					62,700			62,700
TOTAL	0	0	65,000	0	62,700	0	0	127,700

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:	2008 State	Transporta	ation Impro	vement Pro	gram - RIP	- New (Sa	nta Clara)	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)		6,100						6,100
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON					8,900			8,900
TOTAL	0	6,100	0	0	8,900	0	0	15,000

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

# BASIS OF PROJECT SCOPE, COST, SCHEDULE, AND BENEFITS

#### **I-880 Improvements – SR 237 to US 101**

## **Project Scope**

This project will widen I-880 to add a High Occupancy Vehicle (HOV) lane in each direction. The project limits are On I-880 in Santa Clara County between Old Bayshore Highway in the City of San Jose and Route 237 in the City of Milpitas.

### **Project Cost Estimate**

Proposed Total Project Cost (escalated)			
Component	Cost		
E&P (PA&ED)	6,100,000		
PS&E	6,800,000		
R/W	58,200,000		
CON	71,600,000		
TOTAL	142,700,000		

# Project Schedule

Phase	Begin	Complete
Environmental	On-Going	Jun-09
Right of Way	Jun-09	Mar-11
Design	Jun-09	Feb-11
Construction	Aug-11	Sep-13

# **Project Benefits:**

- The increased capacity, accompanied by strategic Intelligent Transportation System (ITS) deployment within and beyond the project limits, will bring with it measurable benefits in terms of connectivity, mobility, safety, and access.
- This extension is an important step in the implementation of the Metropolitan Transportation Commission's (MTC's) 1997 High-Occupancy Vehicle Lane Master Plan Update for the San Francisco Bay Area. The project will also augment the Silicon Valley Smart Corridor (SVSC) Intelligent Transportation System (ITS) established along the Highway 17 and I-880 corridor from Los Gatos to Milpitas. The program is designed to collect and integrate real-time data with a variety of traffic management systems along the route, linking regional and local traffic operations centers with fiber optics.
- With respect to mobility benefits, traffic volumes are projected to exceed current freeway capacity by 35 to 45 percent at bottleneck locations within the project area within the next 20 years. Traffic analyses indicate that the project will result in a significant overall reduction in vehicle hours of delay and in specific peak hour travel timesavings. More than 65 million vehicle hours of delay could be saved over the 20-year life of the project, a reduction of more than 9,000 vehicles hours per day. During peak hour travel this could mean a savings of 5 to 10 minutes over the 4.3-mile segment.

- Enhanced safety will be a third key benefit. Congestion has been identified as the primary cause of accidents in the project area, with 68 percent of accidents classified as rear end collisions. The increased capacity provided by the two HOV lanes is expected to result in up to a 9.7 percent reduction in injury accidents and a 26.3 percent reduction in the total number of collisions, based on statewide averages for comparable facilities.
- A final benefit will be improved access. With a current Average Daily Traffic (ADT) estimate of 205,000 vehicles, I-880 is the central approach to Santa Clara County from the north. Access to jobs, to housing, and to San Jose Mineta International Airport will all be positively impacted by the increased capacity and improved operations.

District:	4	Project #	34
		EA:	219-29830K
PROJECT:	I-880 Widening from 101 to 237	PPNO:	

1A PROJEC	T DATA
Type of Project	Enter HOV restriction in section 1B
Select project type from list	HOV Lane
Project Location (enter 1 for So. Cal., 2 for No. C	Cal., or 3 for rural)
Length of Construction Period	2 years
Length of Peak Period(s) (up to 8 hrs)	4 hours

	DATA	FIC DAT	1B HIGHWAY DESIGN AND TRA
lew	ing New	Existing	Highway Design
6		6	Number of General Traffic Lanes
2		0	Number of HOV Lanes
		2	HOV Restriction (2 or 3)
75	75	75	Highway Free-Flow Speed
35	35	35	Ramp Design Speed (if aux. lane/off-ramp proj.)
4.3	3 4.3	4.3	Length (in miles) Highway Segment
4.3	3 4.3	4.3	Affected Area
Project		205,000 w/o Project	Average Daily Traffic  Current
3,905	905 206,9	206,905	Base (Year 1)
5,000	225,0	225,000	Forecast (Year 20)
593	3,59	3,593	Average Hourly HOV Traffic (if HOV lanes)
			Percent Traffic in Weave (if oper. improvement)
3%	6 9%	9%	Percent Trucks (include RVs, if applicable)
			Truck Speed (if passing lane project)
n-Peak	ak Non-Pe	Peak	On-Ramp Volume
	0	0	Hourly Ramp Volume (if aux. lane/on-ramp proj.)
			Metering Strategy (1, 2, 3, or D, if on-ramp proj.)
$\dashv$			
			-

Actual 3-Year Accident Data for Facility		
	Count (No.)	Rate
Fatal Accidents	1	0.00
Injury Accidents	253	0.26
Property Damage Only (PDO) Accidents	673	0.70
Statewide Average for Highway Classification	on	
natemate Average for ringiniary Glassification		
nateriae Average for riighway Glassinoad	Existing	New
Accident Rate (per million vehicle-miles)	Existing 0.84	0.80

$\bigcirc$		
	•	

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

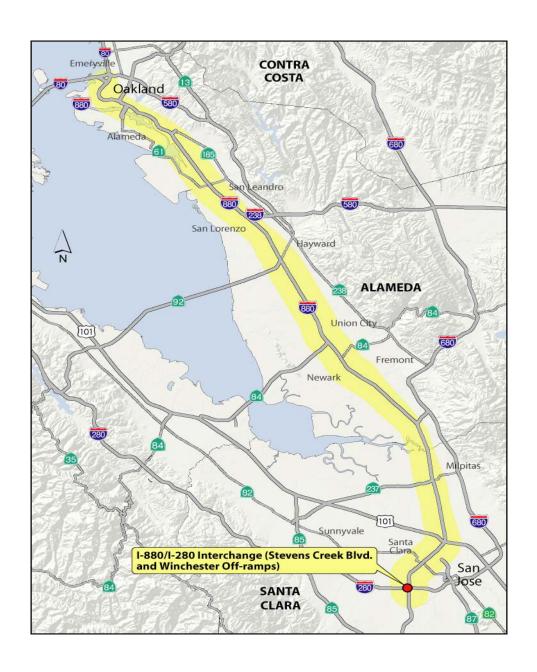
Prepare Model for Second Road

#### TOTAL CMIA PROJECT COSTS (in escalated dollars)

From Project Nomination Fa	act Sheet:
Fiscal Yea	ar:
Before	
2007-08	\$ 6,100,000
2008-09	\$ 65,000,000
2009-10	\$ -
2010-11	\$ 35,800,000
2011-12	\$ 35,800,000
2012-13	
After	
TOTAL	\$ 142,700,000
Escalation Factor	3.5%

# **Project Location Map**

# I-880/I-280 Interchange Improvements (Stevens Creek and Winchester Off-Ramps)



#### CMIA PROJECT NARRATIVE

I-880 South Corridor in Santa Clara County: I-880 (Stevens Creek Blvd.)/I-280 (Winchester Blvd.) Improvements

# **Travel Corridor Description**

Interstates 280 and 880 are part of the Freeway and Expressway system, National Truck Network and Interregional Road System. These freeways are important routes for moving goods and freight through, into, and out of the region, serving statewide, national and international markets. They are also major routes that Santa Clara County residents and visitors use daily for travel to home, work, shopping and leisure destinations.

The I-880 corridor is primarily an eight-lane facility between I-980 and SR237 and a six-lane highway between SR 237 and I-280, with numerous auxiliary lanes between major interchanges. Traffic along this route has continued to increase over the last twenty years as more commuters travel to and from the Silicon Valley, primarily the "Golden Triangle" area bounded by SR 237, Route 101 and I-880. Increases in traffic volumes over the past 30 years from the Tri-Valley area and the Central Valley in the north and the San Jose area to the south are well documented. I-880 is identified as a "gateway of regional significance" in the 1998 Interregional Transportation Strategic Plan (ITSP), particularly for pacific trade.

### **Project Function**

The project proposes to improve the connection between NB I-280 and NB I-880 to relieve traffic congestion and improve safety. The section between I-880 (Stevens Creek Blvd.) and I-280 (Winchester Blvd.) requires improvements due to congestion and delay, particularly at the single-lane collector-distributor ramp between I-280 and the Stevens Creek Boulevard off-ramp. These segments are heavily traveled due to the high traffic volume from residential, business, and retail locations along the collector-distributor arterials. Stevens Creek Boulevard is a major east-west arterial located just north of I-280 that serves numerous traffic generators such as Santana Row and the Valley Fair mall.

The project includes operational and safety improvements, including a braided ramp structure to separate the merge and weave improvements from northbound I-280 to northbound I-880, and to relieve traffic congestion at the ramp termini at Stevens Creek Boulevard. Additional components include a new northbound I-280 off-ramp at Winchester Boulevard. It will also include ramp improvements to separate traffic for the northbound collector/distributor ramp and improve the northbound I-880 diagonal on-ramp.

# **Project Benefits**

#### A. Operations and Safety

This project will improve traffic operations and minimize traffic delays along I-880 and I-280. More specifically, it will relieve the merging and weaving problems between the northbound I-280 to northbound I-880 connector ramp and the Stevens Creek Boulevard

off-ramp and improving operations for traffic proceeding to northbound I-880. Traffic congestion at this location is particularly apparent due to the close proximity of major regional retail destinations along Stevens Creek Boulevard and backups frequently extend onto the freeway mainline lines.

Enhanced safety will be another benefit of the project. Congestion has been identified as a major cause of accidents within the project limits, many of which are rear-end collisions. Implementing the operational improvements should result in a measurable reduction in the number of congestions-related accidents.

#### B. Air Quality

The nine-county region is part of the San Francisco Bay Area Air Quality Basin. The region currently meets the national attainment standards for Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter ( $PM_{10}$ ), fine Particulate Matter ( $PM_{2.5}$ ), and lead. The area has been designated a marginal nonattainment area for Ozone based on current federal standards. Additionally, the region does not meet the current state standards for Ozone,  $PM_{10}$  and  $PM_{2.5}$ , but is in attainment for the other pollutants listed above. The projected reductions in daily vehicle hours of delay from this project will have a beneficial effect on air quality, as air pollutant emission reductions are realized from increased travel times and speeds.

In February 2005, the MTC adopted the 25-year Regional Transportation Plan (RTP). The transportation air quality conformity analysis of the Plan resulted in a positive conformity finding. This project is included in the current RTP and in the air quality conformity analysis, and is therefore part of a conforming transportation plan.

#### C. Access to Jobs, Housing, Markets and Commerce

Major retail, business, and facility traffic generators within this corridor include: Silicon Valley, downtown San Jose, San Jose International Airport, San Jose State University, HP Pavilion at San Jose, Center for Performing Arts, Children's Discovery Museum, Tech Museum of Innovation, Valley Fair Mall, Great Mall, and Santana Row. Additionally, new housing developments adjacent to Winchester Boulevard, Stevens Creek Boulevard, and the I-880/I-280 interchange have put a strain on the existing freeway and distributor/collector system, thereby further reducing reliable access to and from this area. Relieving congestion at the I-880/Stevens Creek Boulevard and I-280/Winchester Boulevard though providing ramp improvements will provide increased capacity, thereby facilitating access to jobs, housing, markets and commerce.

# **Project Risks**

The project is well-positioned with regards to risk management in terms of cost, schedule, and anticipated benefits. The project is in the PA&ED phase of environmental clearance. The anticipated project benefits are based on current data and extensive traffic analyses, thus resulting in negligible risk in terms of project data validation.

# Corridor System Management Plan / Preserving Mobility Gains

Caltrans District 4 and the Metropolitan Transportation Commission (MTC) have launched the region-wide Freeway Performance Initiative. The intent is to advance a

corridor based and performance driven transportation planning process, employing tested System Management principles and strategies to maximize the efficiency of the existing transportation infrastructure. The I-880 South Corridor is one of the 12 "Key Corridors" identified for analysis and development of a Corridor System Management Plan over the next 18 months.

Over the past several years, VTA has adopted a corridor management approach to planning and project development. This has been manifested in critical corridor-wide studies that examine not just need and impact within the project limits, but the more comprehensive interactions throughout the corridor. These studies propose solutions that work to the benefit of the corridor as a whole. As part of the CMIA process, VTA is reviewing the effects and lessons learned through this process with the intent of developing this approach into a formal corridor management plan.

#### CORRIDOR MOBILITY IMPROVEMENT ACCOUNT

#### **Project Nomination Fact Sheet**

Nominating Agenc	y: Santa Clara Valley Transportation Author	ity (VTA)	Fact Sheet Date:	01/11/07
Contact Person	ct Person John Ristow - Deputy Director, Programming & Project Development			
Phone Number	(408) 321-5713	Fax Number	(408) 321-5723	
Email Address	John.Ristow@vta.org			

County	Caltrans District	PPNO *	EA*	Region/MI	PO/ TIP ID*	Route / Corridor *	Post Mile Back *	Post Mile Ahead *
Santa Clara	4				•	880		
* NOTE: PPNO & EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO. Route/Corridor & Post Mile Back/Ahead used for State Highway System.								
Legislative Districts	Senate: 13,15 Congressional: 15							
Legislative Districts	Assembly: 24							
Implementing Agency	PA&ED:	PA&ED: VTA PS&E: VTA						
(by component)	R/W:	VTA			CON: VTA	l		
			·					
Project Title	I-880/I-28	30 Interchan	ige Improven	nents (Steve	ns Creek Blv	d and Winc	hester Off-Ramp	s)

Location - Project Limits - Description and Scope of Work (Provide a project location map on a separate sheet and attach to this form)
Location / Project Limits: On I-880 in the City of San Jose, Santa Clara County, extending from Stevens Creek Blvd to the I-280
and I-280 to Winchester Blvd

Scope: Construct operational and safety improvements as follows:

- Ramp improvements to separate traffic for the NB collector-distributor ramp
- Improve intersection of the NB 280/880 ramp termini at Stevens Creek
- Remove NB 880 to WB loop onramp to Stevens Creek
- Improve NB 880 diagonal on-ramp
- Construct NB 280 off-ramp at Winchester Blvd.

#### **Description of Major Project Benefits**

- Relieve congestion at I-880 & I-280 corridors at Stevens Creek Blvd. & Winchester Blvd.)
- Improve operational safety along the I-880 corridor and I-280 corridor
- Provide increased capacity to improve mobility
- Improve connectivity of Interregional System
- Improve ITS operations and overall corridor traffic flow through effective use of ramp metering.
- Enhance movement of goods
- Improve traffic operations and minimize traffic delays along I-880 and I-280.

#### Expected Source(s) of Additional Funding Necessary to Complete Project - as Identified Under 'Additional Need'

Project Delivery Milestones (month/year):				
Project Study Report (PSR) complete	Jan-07			
Notice of Preparation Document Type: IS/ EA	Mar-07			
Begin Circulation of Draft Environmental Document	Mar-08			
Final Approval of Environmental Document	Dec-08			
Completion of plans, specifications, and estimates	Jan-10			
Right-of-way certfication	Jan-10			
Ready for advertisement	Feb-10			
Construction contract award	Jul-10			
Construction contract acceptance	Oct-11			

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan

(dollars in thousands and escalated)

Shaded fields are automatically calculated. Please do not fill these fields.

				<b>Date:</b> 11-Jan-07	
County	CT District	PPNO *	EA*	Region/MPO/TIP ID *	
Santa Clara	4	0	0	0	
Project Title: I-880/I-280 Interchange Improvements (Stevens Creek Blvd and Winchester Off-Ramps)					

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>							Project	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	1,000	1,000	0	0	0	0	0	2,000
PS&E	0	6,000	0	0	0	0	0	6,000
R/W SUP (CT) *	0	0	0	0	0	0	0	0
CON SUP (CT) *	0	0	0	0	0	0	0	0
R/W	0	0	5,000	0	0	0	0	5,000
CON	0	0	0	57,000	0	0	0	57,000
TOTAL	1,000	7,000	5,000	57,000	0	0	0	70,000

Corridor Manageme	ent Improvem	ent Account	(CMIA) Prog	ram				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON				50,000				50,000
TOTAL	0	0	0	50,000	0	0	0	50,000

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:	State Trans	State Transportation Improvement Program - RIP - New (Santa Clara)						
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E		1,000						1,000
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W			1,000					1,000
CON				5,500				5,500
TOTAL	0	1,000	1,000	5,500	0	0	0	7,500

Funding Source:	SAFETEA	Earmark						
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)		500						500
PS&E		5,000						5,000
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W			4,000					4,000
CON				1,500				1,500
TOTAL	0	5,500	4,000	1,500	0	0	0	11,000

Funding Source:	Local							
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	1,000	500						1,500
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	1,000	500	0	0	0	0	0	1,500

Shaded fields are automatically calculated. Please do not fill these fields.

### BASIS OF PROJECT SCOPE, COST, SCHEDULE, AND BENEFITS

#### I-880/I-280 Improvements (I-880/Stevens Creek Blvd and I-280/Winchester Blvd in San Jose)

## **Project Scope**

The project contains operational and safety improvements, including a braided ramp structure to separate the merge and weave movements and to relieve traffic congestion at the ramp termini at Stevens Creek Boulevard and new northbound 280 off ramp at Winchester Boulevard. The project limits on I-880 in the City of San Jose, Santa Clara County, extend from Stevens Creek Blvd. to the I-280 and I-280 to Winchester Blvd.

#### **Project Cost Estimate**

Proposed Total Project Cost (escalated)				
Component	Cost			
E&P (PA&ED)	2,000,000			
PS&E	6,000,000			
R/W	5,000,000			
CON	57,000,000			
TOTAL	70,000,000			

# **Project Schedule**

Phase	Begin	Complete
Environmental	Jan-07	Dec-08
Right of Way	Jun-09	Jan-10
Design	Jun-09	Jan-10
Construction	Jul-10	Oct-11

#### **Project Benefits:**

VTA anticipates that building this project will improve traffic operations and minimize traffic delays along I-880 and I-280. Specifically, it will relieve the merge and weave problems at the northbound I-880 and southbound I-280 collector-distributor ramp exiting to Stevens Creek Boulevard and improve traffic proceeding to northbound Route I-880. Traffic congestion at this location is particularly bad due to the close proximity of major regional shopping destinations along Stevens Creek Boulevard.

Other operational benefits include enhanced overall traffic flow through the effective use of ramp metering, consistent with Intelligent Transportation Systems (ITS) focus. Enhanced safety will be another project benefit. Congestion has been identified as a major cause of accidents within the project limits, many of which are rear-end collisions. By implementing the operational improvements, VTA expects these improvements to result in a measurable reduction in the amount of congestion-related accidents.

District:	4	Project # EA:	880/280/SCB
PROJECT:	I-880 Improvements (Stevens Creek Blvd Off-Ramp) and I-280	PPNO:	
	Improvements (Winchester Off-Ramp)		

1A PROJECT DATA					
Type of Project	Remember to run model for both roads				
Select project type from list	Interchange				
Project Location (enter 1 for So. Cal., 2 for No.	Cal., or 3 for rural)				
Length of Construction Period	1.5 years				
	Existing				
Length of Peak Period(s) (up to 8 hrs)	4 hours				

1B HIGHWAY DESIGN AND TRAF	FIC DAT	A
Highway Design	Existing	New
Number of General Traffic Lanes	3	3
Number of HOV Lanes	1	1
HOV Restriction (2 or 3)	2	
` '		
Highway Free-Flow Speed	65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)		0
Length (in miles) Highway Segment	2.0	2.0
Affected Area	2.0	2.0
Average Daily Traffic		
Current	110,000	
	w/o Project	w/ Project
Base (Year 1)	112,594	112,594
Forecast (Year 20)	145,450	145,450
Average Hourly HOV Traffic (if HOV lanes)	1,200	1,200
Percent Traffic in Weave (if oper. improvement)		
Percent Trucks (include RVs, if applicable)	3%	3%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		

1C HIGHWAY ACCIDENT DATA							
Actual 3-Year Accident Data for Facility							
•	Count (No.) Rate						
Fatal Accidents	1	0.00					
Injury Accidents	165	0.68					
Property Damage Only (PDO) Accidents	471	1.96					
	•						
Statewide Average for Highway Classification	on						
	Existing	New					
Accident Rate (per million vehicle-miles)	0.84	0.84					
Percent Fatal Accidents	2%	2%					
Percent Injury Accidents	37%	37%					

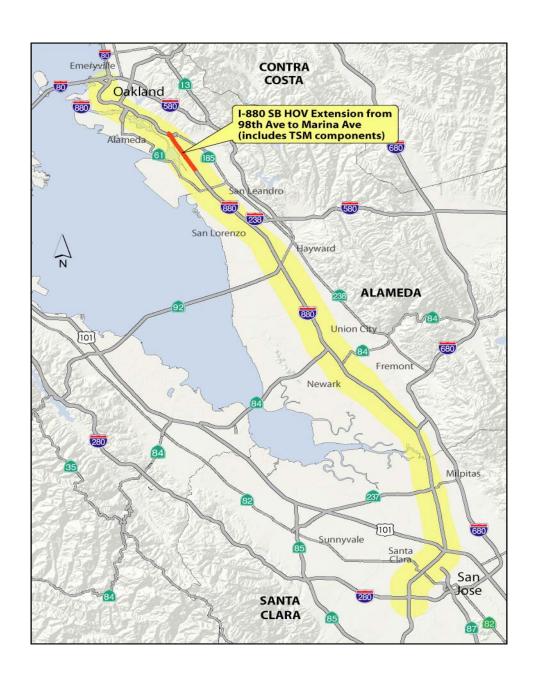
TOTAL CMIA PROJECT COSTS (in escalated dollars)

From Project Nomination Fact Sheet:		
Fiscal Year:		
Before 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 After		
TOTAL Escalation Factor	\$ 70,000,000 3.5%	

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

# **Project Location Map**

# Widen I-880 for HOV Lanes Southbound from South of Marina Blvd. to South of Hegenberger Rd.



#### CMIA PROJECT NARRATIVE

# **ALAMEDA-I-880 SB HOV Lanes from Marina Boulevard in San Leandro to Hegenberger Road in Oakland**

### **Travel Corridor Description**

Interstate 880 (I-880) extends 35 miles through Alameda County and is the fifth most congested freeway corridor in the San Francisco Bay Area. The 880 corridor is a major local and regional commute and trade corridor centrally located within the Bay Area. It is a strategic route providing connectivity between densely populated residential areas and many major commercial and industrial centers. The corridor plays a key role in freight and goods movement, directly serving the Port of Oakland, the fourth busiest port in the United States. The corridor includes a freeway network (with I-880 and I-580 running north-south, and freeway connectors running east-west including I-980 and SR 238), major arterials which absorb diversion from the freeway networks, and a transit network, which includes a rail system, and multiple bus transit lines. The efficient operation of I-880 is of critical economic importance to the region and the state as well as the entire nation.

The I-880 corridor is primarily an eight-lane facility, with numerous auxiliary lanes between major interchanges. I-880 is included in California's Freeway and Expressway System and is identified as a State Interregional Road System Route. The I-880 corridor is a major regional freeway facility that extends between I-280 in San Jose and I-80 in Oakland and intersects with US 101, SR 237, SR 262, SR 84, SR 92, I-238, SR 61, SR 260 and I-980. Not only does I-880 serve as a major commute and freight truck line along the east side of San Francisco Bay, it provides connections to three east-west transbay crossings (San Francisco/Oakland, San Mateo and Dumbarton Bridges). An HOV lane is currently in place for about two-thirds of the length of the corridor. Transportation management systems (TMS) have been widely deployed in the corridor, including: ramp metering and HOV bypass lanes at meters; incident and emergency management systems; changeable message signs on freeways and arterials; and coordinated traffic signal systems on all major arterials. Public transit services paralleling the freeway are also widely available, including Bay Area Rapid Transit (BART) rail and Alameda-Contra Costa (AC) Transit bus service.

#### **Project Function**

The proposed project will extend the existing southbound HOV lane on I-880 three miles from its current beginning point, south of the Marina Boulevard overcrossing in San Leandro, to just south of the Hegenberger Road overcrossing in Oakland. In order to accommodate the widening required for the HOV lane, the project will reconstruct non-standard bridges over I-880 at Davis Street and Marina Boulevard. Reconstruction will eliminate existing bridge columns that prohibit the widening of I-880 to accommodate standard mainline lane widths, standard shoulders where feasible, and the proposed HOV lane. This project also includes the installation of TOS devices where gaps in coverage currently exist.

# **Project Benefits**

# A. Operations and Safety

A bottleneck currently develops north of Marina Boulevard and congestion on southbound 880 occurs just north of the current HOV lane in the proposed project area and causes delays of up to 7 minutes (410 vehicle-hours) from Hegenberger Road to the Route 238 interchange during the PM peak period. Existing traffic volumes are fairly high. The AM peak period volumes are in the mid 7,000's and PM peak volumes are in the upper 7,000's. The 2030 Regional Transportation Plan (RTP) forecasts AM and PM volumes in the mid 8,000's and 9,000's. With these volume levels, it is expected that congestion in both AM and PM will increase in the future. The proposed I-880 southbound HOV lane project will serve to alleviate existing and projected congestion along this corridor, as well as upgrade the facility to meet safety and operational requirements.

Currently, the southbound I-880 HOV lane begins at the Marina Boulevard interchange, continues south and terminates at Mission Boulevard. In Santa Clara County, the southbound 880 HOV lane begins at Dixon Landing Road and continues to SR 237. A segment from Mission to Dixon Landing is currently under construction and will close the gap. This project extends the southbound HOV lane from Marina Boulevard to south of Hegenberger Road and in conjunction with another proposed project to widen I-880 for an HOV lane from SR 237 to US 101, would provide a continuous southbound HOV lane on I-880 from Oakland to US 101 in Santa Clara County. The HOV network would allow HOV lane users and transit riders increased timesavings and would encourage commuters to rideshare.

This section of the I-880 corridor experiences an annual average daily traffic (AADT) volume of approximately 113,000 vehicles. The current overall daily delay is approximately 410 vehicle hours of delay per day. Truck traffic percentages range from 4.4% to 10.7% of the total daily traffic The project will add an HOV and auxiliary lane in the southbound direction increasing vehicle occupancy in the corridor, reducing delays for HOV and mixed-flow vehicles and help complete the HOV network between Alameda and Santa Clara counties. The project will also reconstruct the non-standard overcrossings (15.4 feet), that are routinely hit by oversized vehicles, to allow for increased safety and standard vertical clearance (16.5 feet). Correction of this deficiency will improve reliability of the route for trucking and Port movements, and thus improve the reliability of commuter travel and commerce.

# B. Air Quality

Alameda County is part of the San Francisco Bay Area Air Quality Basin. The region currently meets the National attainment standards for Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter ( $PM_{10}$ ), fine Particulate Matter ( $PM_{2.5}$ ), and lead. However, the Region does not meet the current state standards for Ozone,  $PM_{10}$  and  $PM_{2.5}$ , but is in attainment for the other pollutants listed above. The projected reductions in daily vehicle hours of delay from this project will have a beneficial effect on air quality, as motorist travel times and speeds increase, significant reductions in air pollutant emissions will be attained.

# C. Access to Jobs, Housing, Markets, and Commerce

The I-880 corridor serves the Port of Oakland, Oakland International Airport and the Oakland Intermodal Gateway Terminal (the Joint Intermodal Terminal), the Oakland/McAfee Coliseum and Oracle Arena, as well as a major concentration of industrial land uses. I-880 serves as both an access route for major inter-regional shippers and a primary intra-regional goods-movement corridor. Trucks comprise between 4% and 11% of the AADT in the corridor. This HOV lane project will extend the existing southbound HOV lane 3, miles on I-880 from south of Marina Boulevard to Hegenberger, improving commute and freight travel times and access to jobs and housing in the corridor.

### **Project Risks**

I-880 between Marina Boulevard and Hegenberger Road includes a number of intermediate freeway crossings. The scope of the impacts to these crossings may not have been fully identified to determine what work may be needed to provide for the HOV lane at these crossings. These crossings include overcrossings at Williams Street, Davis Street, and 98<sup>th</sup> Avenue. There are also undercrossings at the Union Pacific Railroad tracks and San Leandro Creek. In addition, work required to upgrade the freeway to current highway standards within the project's limits may not be known at this conceptual phase of the proposal. There are several residential developments west of I-880 adjacent to the southbound freeway lanes. The scope of the impacts to these homes may not be fully known until studies are completed. The scope of the impact to Warden Avenue Park and the necessary mitigation measures may also not be fully identified.

# Corridor System Management Plan / Preserving Mobility Gains

The I-880 Corridor has been presented as a Corridor Management Plan (CMP) model throughout the State. The CMP represents the first attempt by Caltrans District 4 and the Metropolitan Transportation Commission to develop a phased approach that integrates operational analysis with more traditional system planning, using a foundation of comprehensive performance assessment and evaluation.

Subsequently, Caltrans District 4 and MTC have recently launched a joint effort entitled the Freeway Performance Initiative. The intent of this effort is to continue advancing the Model CMP, employing tested system management principles and strategies to maximize the efficiency of the existing transportation infrastructure.

I-880 is already rich in ITS infrastructure, and the region is committed to implementing system management practices in this corridor. An HOV lane has been in operation in the southern two-thirds of this corridor for 15 years. There is a dense deployment of ITS elements, including 57 Closed Circuit Television cameras, 13 Changeable Message Signs, 12 Extinguishable Message Signs, 6 Highway Advisory Radio, and 167 Traffic Monitoring Stations. Freeway on-ramps have been controlled by ramp meters along the entire length of the corridor from Jackson Street in Oakland to SR-237 for 10 years. Of the 98 on-ramps on this section of the I-880 corridor, 86 of them are currently metered.

#### APPENDIX A

#### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

#### **Project Nomination Fact Sheet**

Nominating Agence	y: Alameda County Congestion Management	Agency	Fact Sheet Date:	01/11/07
Contact Person	Frank Furger			
Phone Number	(510) 836-2560	Fax Number	(510) 836-2185	
Email Address	ffurger@accma.ca.gov			

Project Information	n:							
County	Caltrans District	PPNO *	EA*	Region/MF	PO/ TIP ID*	Route / Corridor *	Post Mile Back *	Post Mile Ahead 3
Alameda	4	0036F	3A920K			880	22.6	25.5
* NOTE: PPNO & EA ass	signed by Cal	trans. Region/M	IPO/TIP ID ass	igned by RTPA/MP	O. Route/Corrido	or & Post Mile Ba	ck/Ahead used for Stat	e Highway System.
Legislative Districts	Senate:	9			Congressional	: 13		
Legislative Districts	Assembly:	16						
Implementing Agency	PA&ED:	ACCMA/Caltr	ans		PS&E: ACC	CMA/Caltrans		
(by component)	R/W:	: ACCMA/Caltrans CON: ACCMA/Caltrans						
Project Title	I-880 Sou	uthbound H	OV Lane E	xtension - Mar	ina to Heger	nberger		
Description of Major P Reduce traffic cong. Street and Marina E  Expected Source(s) of None	estion and Soulevard o	delays and overcrossing	gs will upgra	de nonstandard	d vertical clea	rences to cu	rrent standards.	ction of the Davis
Project Delivery Miles	tones (mon	th/year):						
Project Study Report (P	SR) complet	te	Ap	or-07				
Notice of Preparation	Document '			I-07				
Begin Circulation of Dra				p-08				
Final Approval of Enviro				I-09				
Completion of plans, sp				n-11				
Right-of-way certfication				ay-11				
Ready for advertisemen	nt			ay-11				
Construction contract av	ward		Oc	ct-11				
Construction contract a	cceptance		De	ec-13	· · · · · · · · · · · · · · · · · · ·			

OTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

## CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan

(dollars in thousands and escalated)

Shaded fields are automatically calculated. Please do not fill these fields.

				<b>Date:</b> 11-Jan-07
County	CT District	PPNO *	EA*	Region/MPO/TIP ID *
Alameda	4	0036F	3A920K	0
Project Title:	I-880 Southbo	ound HOV Lane Extension -	- Marina to Hegenberger	

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	ject Cost							Project
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	0	2,000	0	0	0	0	0	2,000
PS&E	0	0	9,500	0	0	0	0	9,500
R/W SUP (CT) *	0	0	500	0	0	0	0	500
CON SUP (CT) *	0	0	0	0	10,900	0	0	10,900
R/W	0	0	0	0	1,400	0	0	1,400
CON	0	0	0	0	83,700	0	0	83,700
TOTAL	0	2,000	10,000	0	96,000	0	0	108,000

Corridor Manageme	ent Improvem	ent Account	(CMIA) Progi	am				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)		2,000						2,000
PS&E			9,500					9,500
R/W SUP (CT) *			500					500
CON SUP (CT) *					10,900			10,900
R/W				0	1,400			1,400
CON				0	83,700			83,700
TOTAL	0	2,000	10,000	0	96,000	0	0	108,000

\* NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Shaded fields are automatically calculated. Please do not fill these fields.

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

							Date:	11-Jan-07
County	CT District	PPN	0 *		EA*		Region/MP	O/TIP ID *
Alameda	4	003	-		3A920K		0	
Project Title:	I-880 Southbo				genberger			
* NOTE: PPNO and EA a	ssigned by Caltrans.	Region/MPO/TIP	ID assigned by RT	PA/MPO				
Funding Source:					-			
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W	+							0
CON								0
TOTAL	0	0	0	0	0	0	0	0
TOTAL	<u> </u>	U <sub>1</sub>	•	•	<u> </u>		V	<b>U</b>
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)		0.700	30,00	00,10	. 6,	,	12, 10	0
PS&E								0
R/W SUP (CT) *	+							0
CON SUP (CT) *	+							0
R/W								0
CON	+							0
TOTAL	0	0	0	0	0	0	0	0
TOTAL	U	U	U	U	U	U	U	U
Funding Source:								1
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	FIIOI	01/08	00/09	09/10	10/11	11/12	12/13	10tai
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON			_		_			0
TOTAL	0	0	0	0	0	0	0	0
A 1 1921 1 1 1 1 1 1								
Additional Fundin					40/44	44/40	40/40	T-7-1
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13+	Total
E&P (PA&ED)								0
PS&E	1							0
R/W SUP (CT) *	1							0
CON SUP (CT) *	1							0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Shaded fields are automatically calculated. Please do not fill these fields.

# BASIS OF PROJECT SCOPE, COST, SCHEDULE, AND BENEFITS I-880 SOUTHBOUND HOV LANE

#### Project Scope

o This project is currently in the planning phase. The project scope was developed based on information from the ongoing Project Study Report (PSR). The PSR is scheduled to be completed by April 2007.

#### Project Cost Estimate

- O Costs used in this application are based on information from the ongoing Project Study Report. Project costs have been developed based on quantity takeoffs and recent bid prices for similar projects in District 4. PSR cost estimates for the HOV Lane project have been developed in 2006 dollars, escalated to the midpoint of construction.
- A review of Caltrans published construction cost increases show substantial growth in the index since 2003 (index grew from 148.6 in 2003 to 268.3 in 2005, up 40% per year statewide). Analysis for longer terms reveals the following results:
  - From 1986, the average growth to 2005 was 3.1% for roadway items and 2.9% for bridge items
  - From 1996, growth was 5.0% for both bridge and roadway
- o From 2000, growth was 7.2% for roadway items, and 6.8% for bridge Based on the above analysis, we are assuming the following escalation factors from the base estimates:
  - 7% compounded annually for construction items
  - 4% compounded annually for professional services

#### Project Schedule

O The schedule was developed based on information from the Project Study Report and PEAR. It is based on a risk design approach in which the environmental clearance effort and final design effort will be undertaken concurrently. It assumes 24 months for developing and clearing the environmental document (mitigated ND/FONSI), and 22 months to secure the right of way. The right of way required for this project includes property rights from Union Pacific Railroad.

#### Project Benefits:

- o The project benefits were derived from the following documents:
  - Information from studies for the PSR that is under development
  - Studies undertaken by the Department in the corridor

• Transportation 2030 Plan for the San Francisco Bay Area – FINAL – February 2005

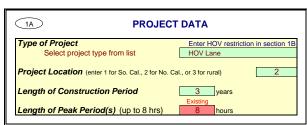
RTP (T2030) Project Description	Page	ID#
Ala 880 – Widen I-880 for HOV lanes northbound from Hacienda overcrossing to 98th Avenue and southbound from 98th Avenue to	90	22670 Partial
Marina Boulevard		

(Copies of these reports are available upon request. See Project Narrative for a detailed description of the project benefits)

#### Project Contingency Funding

The project cost estimate was developed based on a 20% contingency and a 7% construction cost escalation rate extended to midyear of construction. Should the project cost increases, funding for the increase will be secured from future STIP or local funding sources.

District:	4	Project #	33
		EA:	OA710k
PROJECT:	I-880 Extended HOVs North to 98th Avenue, Hayward/San Leandro/Oakland	PPNO:	



1B HIGHWAY DESIGN AND TRAF	FIC DAT	A
Highway Design	Existing	New
Number of General Traffic Lanes	4	4
Number of HOV Lanes	0	1
HOV Restriction (2 or 3)	2	
Highway Free-Flow Speed	65	70
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	3.0	3.0
Affected Area	3.0	3.0
Average Daily Traffic  Current	115,000	
	w/o Project	w/ Project
Base (Year 1)	116,091	116,091
Forecast (Year 20)	123,000	123,000
Average Hourly HOV Traffic (if HOV lanes)	1,520	1,615
Percent Traffic in Weave (if oper. improvement)	450/	15%
Percent Trucks (include RVs, if applicable)	15%	15%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	1520	458
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		
-		
	l	l

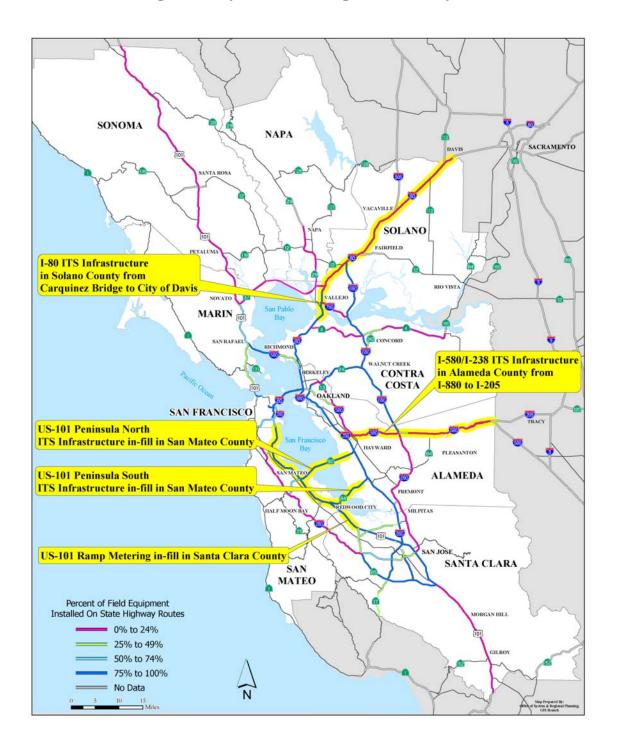
1C HIGHWAY ACCIDENT DATA									
Actual 3-Year Accident Data for Facility									
	Count (No.)	Rate							
Fatal Accidents	3	0.01							
Injury Accidents	170	0.45							
Property Damage Only (PDO) Accidents	443	1.17							
Statewide Average for Highway Classificati									
	Existing	New							
Accident Rate (per million vehicle-miles)	1.21	1.21							
Percent Fatal Accidents	0.5%	0.5%							
	30.9%	30.9%							

From Project Nomination Fact Sheet:								
Fiscal Year	r:							
Before 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 After	\$ - \$ 54,000,000 \$ 27,000,000 \$ 27,000,000							
TOTAL Escalation Factor	\$ 108,000,000 3.5%							

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

## Metropolitan Transportation Commission Corridor Mobility Improvement Account Program of Projects

### **Regional System Management Projects**



### **Bay Area Proposed CMIA System Management Projects**

The Bay Area's freeway system extends approximately 620 miles throughout the region and accounts for about 60% of all miles driven by trucks and passenger vehicles. Extensive portions of the system, primarily the region's core freeways, are currently equipped with at least some Traffic Operations Systems (TOS) field elements, many of which are linked to the regional Transportation Management Center (TMC) in downtown Oakland. However, many sections, critical to the movement of goods, services, commute and recreational traffic, lack the basic equipment required to effectively manage traffic, improve travel time reliability, enhance safety and ultimately reduce the levels of congestion currently experienced on these facilities.

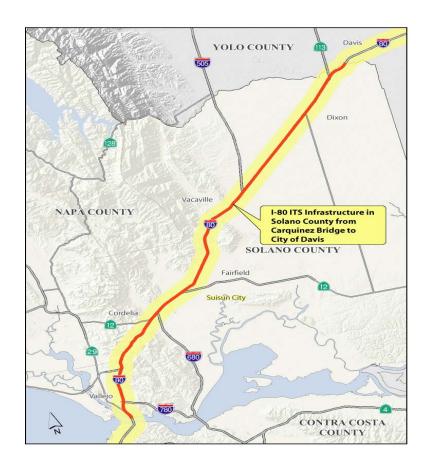
The Bay Area is committed to system management as a means to monitor performance, minimize congestion and provide for the safe and efficient movement of people, goods, services and information. The regional system management strategy being proposed for CMIA funds includes five discrete components focusing on three of the Bay Area's most important corridors: I-80 in Solano County, I-580 in Alameda County and US-101 in San Mateo and Santa Clara Counties. Project Study Reports have been prepared for each of the proposed projects and all have low risks for delivery. In addition, in order to minimize costs, the proposals have been comprehensively reviewed and re-scoped, to only include the most essential system management elements and provide communications (fiber-optics) only where it would significantly enhance interoperability and support multi-agency system management efforts.

As the number of vehicles and miles traveled increases on the Bay Area's freeway system and space available for widening diminishes, the need for efficient management of the existing infrastructure becomes increasingly important. TOS field elements, such as Closed Circuit Televisions (CCTV) cameras and Traffic Monitoring Stations (TMS) allow for the detection non-recurring congestion caused by incidents, and, through the TMC, those incidents can be responded to and cleared as quickly as possible to reduce delays and decrease the occurrence of secondary accidents. Information gathered through CCTV and TMS elements also allows the TMC to provide useful traveler information to motorists through other TOS elements. TOS elements, such as Highway Advisory Radios (HAR), Extinguishable Message Signs (EMS), Changeable Message Signs (CMS) and the Bay Area's 511 system provide a means of communicating messages quickly to motorists upstream of decision points, allowing them to make informed decisions on the best routes to their destinations.

In addition to non-recurrent congestion, TOS field elements and the TMC are also used to manage recurrent congestion through ramp meters. Ramp meters manage congestion by controlling traffic volumes entering a freeway and the TMC can set or change the timing schedules of the meters to match the capacity of the freeway when needed to prevent it form breaking down into congestion. This enables greater throughput and higher speeds to be maintained which results not only in less congestion but also reduced accident rates due to smoother traffic flows.

## **Project Location Map**

## I-80 ITS Infrastructure in Solano County from Carquinez Bridge to City of Davis



#### CMIA PROJECT NARRATIVE

#### I-80 ITS Infrastructure in-fill in Solano County from Carquinez Bridge to Davis

#### **Travel Corridor Description**

I-80 is included in California's Freeway and Expressway System and has been identified by the State as an Interregional Road System route. I-80 is a major transcontinental Interstate between the San Francisco Bay Area and the East Coast. Within California, the highway connects San Francisco with the Sierras via the Bay Area to the Sacramento metropolitan region and provides connectivity to I-5 to the north via I-505. It has become increasingly important as a connector for the growing interregional commute between the Bay Area and Sacramento.

The I-80 – East Solano corridor extends from the Carquinez Bridge (Contra Costa/Solano County line) to the Solano/Yolo County line. It is approximately 44 miles in length and intersects with I-780, SR 37, SR 12, I-680, I-505 and SR 113. Growth in Solano County has had a significant effect on the transportation demand on I-80 due not only to I-80's connection to destinations outside the county but and to a lack of local facilities paralleling the Interstate. Demand factors pertinent to connectivity – including traffic convergence on I-80 from SR 12 to the North Bay and from I-680 to major growth areas in Contra Costa, Alameda and Santa Clara Counties, have greatly exacerbated congestion on I-80. This Interstate, as one of the two facilities that extend east of the region, is vital to interregional and regional commuting, freight movement and recreational travel.

#### **Project Function**

The proposed project will install Traffic Operations System (TOS) field elements on the I-80 East corridor from the Carquinez Bridge to the City of Davis to better manage traffic, improve travel reliability, and reduce congestion. TOS field elements included with this project include Closed Circuit Television (CCTV) cameras, Changeable Message Signs (CMS), Highway Advisory Radios (HAR), Extinguishable Message Signs (EMS), and Traffic Monitoring Stations (TMS). No trunkline communications hardware is being proposed as part of this project.

#### **Project Benefits**

#### A. Operations and Safety

Average daily traffic volumes for the I-80 East corridor range from 114,000 to 214,000 vehicles, with truck traffic accounting for between 4% and 7% of the daily traffic. Currently, significant stretches of the corridor experience high levels of daily congestion, resulting in total corridor delays about 2600 vehicle-hours per day.

In spite of its inter-regional significance, the I-80 East Solano corridor has very little TOS infrastructure currently in place. Because of the lack of funding in the Caltrans SHOPP 315 program, it has not been possible to provide the level of system management investment that is appropriate for a corridor of this importance. As a result, when major or minor incidents occur, there is typically no means to monitor traffic conditions or to

convey useful information to motorists. This situation is further exacerbated by the fact that for a distance of almost 40 miles, there are no viable local routes to detour traffic to when the freeway is blocked.

#### B. Air Quality

The nine-county region is also part of the San Francisco Bay Area Air Quality Basin. The region currently meets the national attainment standards for Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter ( $PM_{10}$ ), fine Particulate Matter ( $PM_{2.5}$ ), and lead. The area has been designated a marginal nonattainment area for Ozone based on current federal standards. Additionally, the region does not meet the current state standards for Ozone,  $PM_{10}$  and  $PM_{2.5}$ , but is in attainment for the other pollutants listed above. The projected reductions in daily vehicle hours of delay from this project will have a beneficial effect on air quality, as air pollutant emission reductions are realized from increased travel times and speeds.

In February 2005, the MTC adopted the 25-year Regional Transportation Plan (RTP). The transportation air quality conformity analysis of the Plan resulted in a positive conformity finding. This project is included in the current RTP and in the air quality conformity analysis, and is therefore part of a conforming transportation plan.

#### C. Access to Jobs, Housing, Markets, and Commerce

The I-80 East Corridor carries significant levels of interregional recreation, commuter and freight traffic and serves as the second Interstate other than I-580 to connect to I-5. I-80 provides access to major interregional and regional Goods Movement corridors including I-5, SR 99, US 101 and I-880. Per the Regional Goods Movement Study currently being developed by the Metropolitan Transportation Commission (MTC), I-80 is one of the four primary truck corridors in the Bay Area.

Over the next 25 years, anticipated employment growth in Contra Costa and Solano Counties will increase by approximately 55%. In addition to this projected employment boom, population and numbers of households in both counties are expected to increase by approximately 47%.

#### **Project Risks**

A Project Study Report for this project is expected to be complete in January 2007 and the project environmental phase will begin when funding becomes available. The scope of the project is well defined and risks to the scope, cost and schedule are anticipated to be low. Nevertheless, potential cost increases could occur because this project has not reached the Project Report or design phase. Environmental impacts or required mitigation could result in cost increases and schedule delays. Fluctuations in the supply and costs of construction materials and the cost of labor could impact cost and schedule. A project risk management plan will also be implemented for this project to reduce and mitigate risks.

#### **Corridor System Management Plan / Preserving Mobility Gains**

Caltrans District 4 and the Metropolitan Transportation Commission have recently launched a joint effort entitled the Freeway Performance Initiative. The intent of this

effort is to advance a corridor based and performance driven Transportation Planning process, employing tested System Management principles and strategies to maximize the efficiency of the existing transportation infrastructure. A team of stakeholders within the corridor is now forming and a consultant team has been selected to begin a detailed performance assessment.

A strategic management plan will be developed to determine the most appropriate and cost-effective means to sustain mobility in the corridor, including ramp metering, enhanced integration between the freeway and transit, and improved incident management practices. Preliminary analysis and recommended strategies are anticipated by the summer of 2007. This initial planning work would lead into the development of an implementation plan for which Solano County has applied for a \$250,000 State Planning & Research grant

Preservation of mobility gains on this corridor are also closely linked with land use and development. Because the freeway serves as the only major transportation link on most of the corridor, MTC is sponsoring an interregional study analyzing the potential benefits of smart growth for transportation and air quality along the I-80 corridor from Solano County through Sacramento to Placer County. The study is being conducted in partnership with the Association of Bay Area Governments, the Solano Transportaion Authority, SACOG and Caltrans.

APPENDIX A CMIA Guidelines

#### CORRIDOR MOBILITY IMPROVEMENT ACCOUNT

### **Project Nomination Fact Sheet**

Nominating Agenc	y: Caltrans		Fact Sheet Date:	01/09/07
Contact Person	Alan S. Chow			
Phone Number	(510) 286-4577	Fax Number	(510) 286-4773	
Email Address	alan _s_chow@dot.ca.gov			

Project Information								
1	1 1			1		Doute /	<u> </u>	1
County	Caltrans District	PPNO *	EA*	Region/MI	PO/ TIP ID*	Route / Corridor *	Post Mile Back *	Post Mile Ahead *
Solano	4	0263J	3A220K			80	0.00	44.72
Napa	4	0263J	3A220K			80	6.8	8.0
Contra Costa	4	0263J	3A220K			80	13.0	14.1
* NOTE: PPNO & EA as:	signed by Ca	ltrans. Region/	MPO/TIP ID ass	igned by RTPA/M	IPO. Route/Corrid	dor & Post Mile E	Back/Ahead used for S	tate Highway System.
Legislative Districts	Senate:	2, 5			Congressional:	3, 7, 10		
	Assembly:	7, 8						
Implementing Agency	PA&ED:	Caltrans			PS&E: Calt	rans		
(by component)	R/W:	Caltrans			CON: Calt	rans		
Project Title	I-80 ITS I	nfrastructu	re in Solano	County from	Carquinez B	ridge to City	of Davis	
Description of Major P	roject Benef	fits						
This project is expected better utilize the road	dway capa	prove travel t acity.	,				ŭ	gestion, and to
better utilize the road	dway capa	rove travel t acity. Funding Nece	,				ŭ	gestion, and to
better utilize the road  Expected Source(s) of  Project Delivery Milest	Additional I	rove travel t acity.  Funding Nece	essary to Comp	olete Project - as			ŭ	gestion, and to
Expected Source(s) of  Project Delivery Milest Project Study Report (PS)	Additional I	rove travel t acity.  Funding Nece  h/year):	essary to Comp				ŭ	gestion, and to
Expected Source(s) of  Project Delivery Milest Project Study Report (Ps	Additional I  ones (monti	Funding Nece h/year): e Type: IS/N	Jan	olete Project - as			ŭ	gestion, and to
Expected Source(s) of  Project Delivery Milest Project Study Report (PS Notice of Preparation Begin Circulation of Draf	Additional I  ones (montl SR) complete Document 7 ft Environme	Funding Nece  h/year):  e Type: IS/N intal Document	Jan D-CatEX	uary 2007			ŭ	gestion, and to
Expected Source(s) of  Project Delivery Milest Project Study Report (PS Notice of Preparation Begin Circulation of Draf Final Approval of Environ	Additional I  Ones (monti SR) complete Document 7 ft Environme nmental Doc	Funding Nece  h/year):  e Type: IS/N ental Document	Jan D-CatEX t Fet	uary 2007 oruary 2009 gust 2009			ŭ	gestion, and to
Expected Source(s) of  Project Delivery Milest Project Study Report (PS Notice of Preparation Begin Circulation of Draf Final Approval of Enviror Completion of plans, spe	Additional I  Ones (montl SR) complete Document 7  ft Environme nmental Doc ecifications, a	Funding Nece  h/year):  e Type: IS/N ental Document	Jan D-CatEX t Fet Aug	uary 2007 uruary 2009 gust 2009 pruary 2012			ŭ	gestion, and to
Expected Source(s) of  Project Delivery Milest Project Study Report (PS Notice of Preparation Begin Circulation of Draf Final Approval of Environ Completion of plans, spe Right-of-way certification	ones (monti SR) complete Document 1 ft Environme nmental Doc ecifications, a	Funding Nece  h/year):  e Type: IS/N ental Document	Jan D-CatEX t Fet Aug	uary 2007 oruary 2009 gust 2009 oruary 2012 oruary 2012			ŭ	gestion, and to
Expected Source(s) of  Project Delivery Milest Project Study Report (PS Notice of Preparation Begin Circulation of Draf Final Approval of Enviror Completion of plans, spe	Additional I  ones (monti SR) complete Document 1 ft Environme nmental Doc ecifications, a	Funding Nece  h/year):  e Type: IS/N ental Document	Jan D-CatEX t Fet Aug	uary 2007 uruary 2009 gust 2009 pruary 2012			ŭ	gestion, and to

The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

#### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan**

(dollars in thousands and escalated)
Shaded fields are automatically calculated. Please do not fill these fields.

				Date:	9-Jan-07
County	CT District	PPNO *	EA*	Region/MP	O/TIP ID *
Solano	4	0263J	3A220K	0	
Project Title:	I-80 ITS Infra				

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	ject Cost							Project
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	0	900	900	0	0	0	0	1,800
PS&E	0	0	0	940	940	940	0	2,820
R/W SUP (CT) *	0	0	65	65	65	65	0	260
CON SUP (CT) *	0	0	0	0	0	0	2,800	2,800
R/W	0	0	0	0	0	50	0	50
CON	0	0	0	0	0	25,700	0	25,700
TOTAL	0	900	965	1,005	1,005	26,755	2,800	33,430

Corridor Management Improvement Account (CMIA) Program								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	0	900	900					1,800
PS&E				940	940	940		2,820
R/W SUP (CT) *			65	65	65	65		260
CON SUP (CT) *							2,800	2,800
R/W						50		50
CON						25,700		25,700
TOTAL	0	900	965	1,005	1,005	26,755	2,800	33,430

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Shaded fields are automatically calculated. Please do not fill these fields.

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

							Date:	9-Jan-07
County	CT District	PPN	0 *		EA*		Region/MP	O/TIP ID *
Solano	4	026			3A220K		C	
Project Title:		structure in So			z Bridge to Cit	y of Davis		
* NOTE: PPNO and EA as	signed by Caltrans.	Region/MPO/TIP I	D assigned by RT	PA/MPO				
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
		•						
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E					İ			0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
101712			· ·	· ·	· ·			J
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)						-		0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
TOTAL	V	V	O	O .	0	V	V	V
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)		01,00				,	1, 1.0	0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
. 517.12	, v							- 0
Additional Funding	Needs (fund	ing needs not	t vet committ	ed)				1
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13+	Total
E&P (PA&ED)	1	21.00	22.00	555			12,101	0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *	<del>                                     </del>						1	0
R/W							1	0
CON							1	0
TOTAL	0	0	0	0	0	0	0	0
TOTAL	U	U	U	U	U	U	U	U

Shaded fields are automatically calculated. Please do not fill these fields.

District:	4	Project #	44a1
	<del></del>	EA:	3A2200
PROJECT:	I-80 ITS infrastructure, Carguinez to Davis: EA# 3A220K - SQL 80 (Incident Management)	PPNO:	

PROJECT DATA			
Type of Project			
Select project type from list	Incident Management		
Project Location (enter 1 for So. Cal., 2 for No.	Cal., or 3 for rural)		
Length of Construction Period	2 years		
	Existing		
Length of Peak Period(s) (up to 8 hrs)	4 hours		

Highway Design	Existing	New
Number of General Traffic Lanes	8	8
Number of HOV Lanes		
HOV Restriction (2 or 3)		
Highway Free-Flow Speed	65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	44.7	44.7
Affected Area	44.7	44.7
Average Daily Traffic	10100-	
Current	164,000	
<b>5</b> 0/ 0	w/o Project	w/ Project
Base (Year 1)	169,836	169,836
Forecast (Year 20)	225,278	225,278
Average Hourly HOV Traffic (if HOV lanes) Percent Traffic in Weave (if oper. improvement)		0
Percent Tranc in Weave (if oper, improvement)  Percent Trucks (include RVs, if applicable)	9%	9%
Truck Speed (if passing lane project)	J 70	370
Truck opoca (ii passing land project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		
· ·		

II DATA	1C HIGHWAY ACCIDENT DATA				
Count (No.)	Rate				
8	0.00				
381	0.05				
1061	0.13				
Statewide Average for Highway Classification					
Existing	New				
1.26	1.26				
1%	1%				
32%	32%				
	Count (No.)  8  381  1061  Existing  1.26  1%				

-		
_		
-		
-		

From Project Nomination Fact Sheet:				
Fiscal Year:				
Before				
2007-08				
2008-09				
2009-10				
2010-11				
2012-13	\$ 8,055,000			
After				
TOTAL	\$ 16,110,000			
Escalation Factor	3.5%			
		•		

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project #	44a2
	·	EA:	3A2200
PROJECT:	I-80 ITS Infrastructure, Carquinez to Davis: EA# 3A220K- SOL 80 (Traveler Information)	PPNO:	

1A PROJECT DATA			
Traveler Information			
Cal., or 3 for rural)			
2 years			
Existing 4 hours			

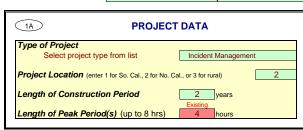
Highway Design	Existing	New
Number of General Traffic Lanes	8	8
Number of HOV Lanes		
HOV Restriction (2 or 3)		
Highway Free-Flow Speed	65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	44.7	44.7
Affected Area	44.7	44.7
Average Daily Traffic	101000	
Current	164,000	/D : .
D (V 1)	w/o Project	w/ Project
Base (Year 1) Forecast (Year 20)	169,836 225,278	169,836 225,278
Average Hourly HOV Traffic (if HOV lanes)	225,210	0
Percent Traffic in Weave (if oper. improvement)		
Percent Trucks (include RVs, if applicable)	9%	9%
Truck Speed (if passing lane project)	0,0	
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		
i		

1C HIGHWAY ACCIDENT DATA			
Actual 3-Year Accident Data for Facility			
	Count (No.)	Rate	
Fatal Accidents	8	0.00	
Injury Accidents	381	0.05	
Property Damage Only (PDO) Accidents	1061	0.13	
Statewide Average for Highway Classifica	tion		
	Existing	New	
Accident Rate (per million vehicle-miles)	1.26	1.26	
Percent Fatal Accidents	1%	1%	
Percent Injury Accidents	32%	32%	
1 0.000, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,			

From Project Nomination Fact Sheet:				
Fiscal Year:				
Before				
2007-08				
2008-09				
2009-10				
2010-11				
2011-12	\$ 8,210,000			
2012-13	\$ 8,210,000			
After				
<u>'</u>		!'		
TOTAL	\$ 16,420,000			
Escalation Factor				

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project #	44b
		EA:	3A2200
PROJECT:	I-80 ITS Infrastructure. Carquinez to Davis: EA# 3A220K - CC 80 (Incident Management)	PPNO:	



1B HIGHWAY DESIGN AND TRAFFIC DATA				
Highway Design	Existing	New		
Number of General Traffic Lanes	6	6		
Number of HOV Lanes				
HOV Restriction (2 or 3)				
, , ,				
Highway Free-Flow Speed	65	65		
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35		
Length (in miles) Highway Segment	0.4	0.4		
Affected Area	0.4	0.4		
Avarage Deily Troffie				
Average Daily Traffic  Current	120,000			
Current	129,000 w/o Project	w/ Project		
Dane (Vent 4)		•		
Base (Year 1) Forecast (Year 20)	133,590 177,200	133,590 177,200		
Average Hourly HOV Traffic (if HOV lanes)	177,200	0		
Percent Traffic in Weave (if oper. improvement)		U		
Percent Trucks (include RVs, if applicable)	9%	9%		
Truck Speed (if passing lane project)	3 70	3/0		
Track Opeca (ii passing lane project)				
On-Ramp Volume	Peak	Non-Peak		
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0		
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)				
S and S ( ) , and , seems propy				
<u></u>				

1C HIGHWAY ACCIDENT DATA				
Actual 3-Year Accident Data for Facility				
	Count (No.)	Rate		
Fatal Accidents		0.01		
Injury Accidents		0.34		
Property Damage Only (PDO) Accidents		0.69		
Statewide Average for Highway Classification	on			
	Existing	New		
Accident Rate (per million vehicle-miles)				
Percent Fatal Accidents				
Percent Injury Accidents				

rom Project Nomination Fact Sheet:					
Fiscal Year:					
Before					
2007-08					
2008-09					
2009-10					
2010-11					
2011-12	\$ 105,000				
2012-13	\$ 105,000				
After					
TOTAL	\$ 210,000				
Escalation Factor	3.5%				
		•			

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project #	44C
		EA:	3A2200
PROJECT:	I-80 ITS Infrastructure, Carguinez to Davis: FA# 3A220K - NAP 80 (Incident Management)	PPNO:	

PROJECT DATA			
Type of Project			
Select project type from list	Incident Management		
Project Location (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural)			
Length of Construction Period	2 years		
Length of Peak Period(s) (up to 8 hrs)	Existing 4 hours		

1B HIGHWAY DESIGN AND TRAFFIC DATA				
Highway Design	Existing	New		
Number of General Traffic Lanes	8	8		
Number of HOV Lanes				
HOV Restriction (2 or 3)				
Highway Free-Flow Speed	65	65		
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35		
Length (in miles) Highway Segment	1.2	1.2		
Affected Area	1.2	1.2		
Average Daily Traffic				
Current	119,000			
	w/o Project	w/ Project		
Base (Year 1)	123,235	123,235		
Forecast (Year 20)	163,464	163,464		
Average Hourly HOV Traffic (if HOV lanes)		0		
Percent Traffic in Weave (if oper. improvement)	00/	001		
Percent Trucks (include RVs, if applicable)	9%	9%		
Truck Speed (if passing lane project)				
On-Ramp Volume	Peak	Non-Peak		
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0		
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)	U	U		
ividentify Strategy (1, 2, 3, of D, if off-famp proj.)				
	l .			

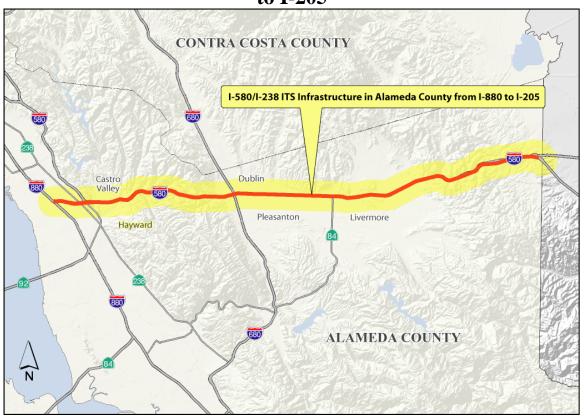
1C HIGHWAY ACCIDENT DATA				
Actual 3-Year Accident Data for Facility				
_	Count (No.)	Rate		
Fatal Accidents		0.01		
Injury Accidents		0.34		
Property Damage Only (PDO) Accidents		0.69		
Statewide Average for Highway Classification	on			
	Existing	New		
Accident Rate (per million vehicle-miles)				
Percent Fatal Accidents				
Percent Injury Accidents				

rom Project Nomination Fact Sheet:				
Fiscal Year:				
	\$ 330,000 \$ 330,000			
TOTAL Escalation Factor	\$ 660,000 3.5%			

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

## **Project Location Map**

I-580/I-238 ITS Infrastructure in Alameda County from I-880 to I-205



#### CMIA PROJECT NARRATIVE

#### I-580/I-238 ITS Infrastructure in-fill in Alameda County from I-880 to I-205

#### **Travel Corridor Description**

The I-580/I-238 corridor is a major inter-regional and regional east-west Interstate connection between the mid-portion of the San Francisco Bay Area and the I-5 corridor, the State's north-south Interstate. The corridor is 33 miles in length, extends from I-880 to I-5/I-205, and intersects with I-680 and SR84. Because of its connectivity with I-5 and SR 99 in the San Joaquin Valley, this corridor is critical to inter-regional and regional commuting. I-580/I-238 is vital to the movement of freight as it is part of the critical highway path to the Port of Oakland and it provides access to distribution centers in the San Joaquin Valley. As such, the corridor is the region's most significant travel path for 5+-axle trucks.

#### **Project Function**

The proposed project will install Traffic Operations Systems (TOS) field equipment and implement ramp metering to help relieve congestion, encourage the use of carpools and transit, and enhance safety along the I-580/I-238 corridor. The project limits extend from the I-880/I-238 interchange to the I-580/I-205 interchange in Alameda County. TOS field elements included with this project include Closed Circuit Television (CCTV) cameras, Changeable Message Signs (CMS), Highway Advisory Radios (HAR), Extinguishable Message Signs (EMS), and Traffic Monitoring Stations (TMS). No trunkline communications hardware is being proposed as part of this project.

#### **Project Benefits**

#### A. Operations and Safety

Average daily traffic volumes along the project segment range between 152,000 and 214,000. Truck traffic accounts for approximately 9.2% to 12.5% of the peak hour traffic volume over the project corridor. The current overall daily delay is approximately 15,000 vehicle-hours per day.

Although some TOS equipment has been installed in the I-580/238 corridor, this corridor is relatively poorly instrumented. Ramp meters have been in operation in the eastbound direction at three interchanges in Pleasanton since June 2003. Only two closed-circuit TV cameras (CCTV), one changeable message sign (CMS), and 29 traffic monitoring stations (TMS) are currently available to manage this critical corridor, far fewer than what is needed. A regionally funded project to install additional TOS elements and ramp meters through Pleasanton and Livermore will begin construction later this year, but large segments of the corridor will still have only limited monitoring capabilities. The project proposed for CMIA funding will deploy most of the additional TOS equipment required throughout the remainder of the corridor.

TOS equipment included in this project would provide benefits to motorists by increasing mobility and safety, and in improving the efficiency and productivity of the regional

transportation system. This is consistent with the goals of the CMIA. TOS elements accomplish this by playing a significant role in incident management and congestion management.

Implementing ramp metering in this corridor will help better manage traffic, which will ultimately reduce congestion. Ramp metering has proven to be an effective management method by controlling traffic volumes entering the freeway to prevent traffic demand from exceeding the facility's capacity, which results in the freeway breaking down into congestion. Additional benefits from metering on this corridor include the promotion of carpool and bus usage by providing preferential entry at high volume on-ramps, thus reducing delays for those vehicles, smoother traffic flow and reduced accidents resulting from congestion.

#### B. Air Quality

The nine-county region is part of the San Francisco Bay Area Air Quality Basin. The region currently meets the national attainment standards for Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter ( $PM_{10}$ ), fine Particulate Matter ( $PM_{2.5}$ ), and lead. The area has been designated a marginal nonattainment area for Ozone based on current federal standards. Additionally, the region does not meet the current state standards for Ozone,  $PM_{10}$  and  $PM_{2.5}$ , but is in attainment for the other pollutants listed above. The projected reductions in DVHD from this project will have a beneficial effect on air quality, as air pollutant emission reductions are realized from increased travel times and speeds.

In February 2005, the Metropolitan Transportation Commission (MTC) adopted the 25-year Regional Transportation Plan (RTP). The transportation air quality conformity analysis of the Plan resulted in a positive conformity finding. This project is included in the current RTP and in the air quality conformity analysis, and is therefore part of a conforming transportation plan.

#### C. Access to Jobs, Housing, Markets, and Commerce

I-580 is the major east/west interregional and international trade corridor connecting the Port of Oakland, Oakland International Airport, and major warehousing centers with I-5, the Central Valley and major freight distribution centers. I-580 is also a major commuter route between the East Bay and Silicon Valley employment centers and more affordable Central Valley housing. It is also a recreational route providing access to major destinations including the Sierra Nevada, Yosemite National Park and Southern California.

#### **Project Risks**

Two Project Study Reports have been approved for this project. It is expected that the environmental document will be a Categorical Exemption/Exclusion. Because the project scope is well-defined, risks to cost and schedule are low to medium. However, cost increases could occur on this project, as it has not yet reached the design phase. Environmental impacts or required mitigation could result in cost increases and schedule delays. Fluctuations in the supply and costs of construction materials and the cost of labor could impact cost and schedule.

The implementation of ramp metering will require cooperation with local agencies and may face opposition, which would affect schedule and cost. However, metering has already been implemented successfully in parts of this corridor, and there appears to be support from the cities.

It should be noted that the scope of this project, as outlined in the attached Caltrans Project Study Report, has been reduced for the CMIA submittal. The project scope for the Caltrans project included ITS infrastructure on the following routes: I-580, I-238 and I-680 within Alameda County; SR-4 and SR-160 in Contra Costa County; I-237, I-280, and I-680 in Santa Clara County and I-280 in San Mateo County. In an effort to reduce cost, the CMIA submittal is requesting \$15 million to install ITS infrastructure on the I-580 and I-238 portions of the project only.

#### **Corridor System Management Plan / Preserving Mobility Gains**

Caltrans District 4 and the Metropolitan Transportation Commission have recently launched a joint effort entitled the Freeway Performance Initiative. The intent of this effort is to advance a corridor based and performance driven Transportation Planning process, employing tested System Management principles and strategies to maximize the efficiency of the existing transportation infrastructure. A team of stakeholders within the corridor is now forming and a consultant team has been selected to begin detailed performance assessment

Another operational strategy being planned to manage congestion in this corridor is the establishment an HOV lane system. There are currently no mainline HOV lanes in this corridor; however, two HOV lane projects are being proposed. These projects would provide eastbound and westbound HOV lanes between the Hacienda/Foothill and Greenville interchanges. Also, the metered on-ramps have HOV bypass lanes. This project, in conjunction with the two HOV projects that are proposed, will help reduce congestion, increase the person-carrying capacity of the corridor, and ensure that the system can be managed to preserve mobility gains.

APPENDIX A CMIA Guidelines

#### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

#### **Project Nomination Fact Sheet**

Nominating Agency: Caltrans Fact Sheet Date: 01/09/0				
Contact Person	Alan S. Chow			
Phone Number	(510) 286-4577	Fax Number	(510) 286-4773	
Email Address	alan _s_chow@dot.ca.gov			

County	Caltrans District	PPNO *	EA *	Region/MPC	)/ TIP ID*	Route / Corridor *	Post Mile Back *	Post Mile Ahead *
Alameda	4	7965B	15113K			580	0.0	R31.0
Alameda	4	7965B	15113K			238	14.4	16.7
Alameda	4	0516C	15192K			580	0.1	R31.0
* NOTE: PPNO & EA as	ssigned by Ca	ltrans. Region/I	MPO/TIP ID assig	ned by RTPA/MP	D. Route/Corrid	dor & Post Mile E	Back/Ahead used for S	tate Highway System
Legislative Districts	Senate:	7, 10		C	Congressional:	10, 13		
Logiciativo Districto	Assembly:	15, 18						
Implementing Agency	PA&ED:	Caltrans		F	S&E: Calt	rans		
(by component)	R/W:	Caltrans		c	CON: Calt	rans		
from the Poute 990	/Pauta 238	interchange	to the Doute					& Route 238
Operations System: (TMS) will be install	s (TOS) fiel	ld elements :					County. In additiond Traffic Monitori	on, Traffic

Expected Source(s) of Additional Funding Necessary to Complete Project - as Identified Under 'Additional Need'

Project Delivery Milestones (month/year):				
Project Study Report (PSR) complete	July 21, 2005			
Notice of Preparation Document Type: CE				
Begin Circulation of Draft Environmental Document	May 2009			
Final Approval of Environmental Document	July 2009			
Completion of plans, specifications, and estimates	February 2012			
Right-of-way certfication	February 2012			
Ready for advertisement	August 2012			
Construction contract award	December 2012			
Construction contract acceptance	December 2014			

The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

#### CORRIDOR MOBILITY IMPROVEMENT ACCOUNT **Project Nomination Fact Sheet - Project Cost and Funding Plan**

(dollars in thousands and escalated)
Shaded fields are automatically calculated. Please do not fill these fields.

				Date: 9-Jan-07
County	CT District	PPNO *	EA*	Region/MPO/TIP ID *
Alameda	4	7965B	15113K	0
Project Title:	I-580/I-238 IT	S Infrastructure in Alameda	County from I-880 to I-205	

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	ject Cost							Project
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	0	450	450	0	0	0	0	900
PS&E	0	0	0	415	415	415	0	1,245
R/W SUP (CT) *	0	0	57	57	57	57	0	228
CON SUP (CT) *	0	0	0	0	0	0	1,250	1,250
R/W	0	0	0	0	0	50	0	50
CON	0	0	0	0	0	11,350	0	11,350
TOTAL	0	450	507	472	472	11,872	1,250	15,023

Corridor Manageme	ent Improvem	ent Account	(CMIA) Progi	ram				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)		450	450					900
PS&E				415	415	415		1,245
R/W SUP (CT) *			57	57	57	57		228
CON SUP (CT) *							1,250	1,250
R/W						50		50
CON						11,350		11,350
TOTAL	0	450	507	472	472	11,872	1,250	15,023

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

		, , ,						
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Shaded fields are automatically calculated. Please do not fill these fields.

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

							Date:	9-Jan-07
County	CT District	PPN			EA*		Region/MP	O/TIP ID *
Alameda	4	796			15113K			
Project Title:		S Infrastructu			I-880 to I-205			
* NOTE: PPNO and EA a	ssigned by Caltrans.	Region/MPO/TIP	ID assigned by R1	PA/MPO				
Funding Source:	- D:	07/00	00/00	00/40	40/44	11/10	10/10	T / 1
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
I <del></del>								
Funding Source:		0=/00	00/00	20/10			1 1	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:				-	•			
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:							1 1	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Additional Form	a Nood- 16:	lla a a a - d -		4 a al\				<del> </del>
Additional Fundin		_	08/09		10/14	11/10	10/10	Total
Component	Prior	07/08	06/09	09/10	10/11	11/12	12/13+	Total
E&P (PA&ED)							<del> </del>	0
PS&E								-
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON					0			0
TOTAL	0	0	0	0	0	0	0	0

Shaded fields are automatically calculated. Please do not fill these fields.

District:	4	Project #	45a1
		EA:	15113K
PROJECT:	TOS Improvements on I-580 corridor ALA 580 Ramp Metering	PPNO:	

1A PROJEC	T DATA
Type of Project	
Select project type from list	Ramp Metering
Project Location (enter 1 for So. Cal., 2 for No.	Cal., or 3 for rural)
Length of Construction Period	2 years
Length of Peak Period(s) (up to 8 hrs)	Existing 4 hours

Highway Design	Existing	New
Number of General Traffic Lanes	8	8
Number of HOV Lanes		
HOV Restriction (2 or 3)		
Highway Free-Flow Speed	65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	31.0	31.0
Affected Area	31.0	31.0
Average Daily Traffic	400.000	
Current	183,000	/ Desire
Dana (Vana 1)	w/o Project	w/ Project
Base (Year 1) Forecast (Year 20)	189,512 251,377	189,512 251,377
Average Hourly HOV Traffic (if HOV lanes)	201,011	0
Percent Traffic in Weave (if oper. improvement)		U
Percent Trucks (include RVs, if applicable)	10%	10%
Truck Speed (if passing lane project)	. 370	. 370
. ,		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.		0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		
	1	

1C HIGHWAY ACCIDENT DATA		
Actual 3-Year Accident Data for Facility		
	Count (No.)	Rate
Fatal Accidents	19	0.00
Injury Accidents	1194	0.19
Property Damage Only (PDO) Accidents	2467	0.40
Statewide Average for Highway Classification	on	
	Existing	New
Accident Rate (per million vehicle-miles)		0.00
Percent Fatal Accidents		0%
Percent Injury Accidents		0%

L	ı	

From Project Nomination Fa	act Sheet:	
Fiscal Yea	r:	
	\$ 3,085,000 \$ 3,085,000	
TOTAL Escalation Factor	\$ 6,170,000 3.5%	

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project #	45a2
		EA:	15113k
PROJECT:	TOS Improvement on I-580 corridor- ALA 580 Incident Management	PPNO:	

1A PROJEC	T DATA
Type of Project	
Select project type from list	Incident Management
Project Location (enter 1 for So. Cal., 2 for No. 0	Cal., or 3 for rural)
Length of Construction Period	2 years
	Existing
Length of Peak Period(s) (up to 8 hrs)	4 hours

Highway Design	Existing	New
Number of General Traffic Lanes	8	8
Number of HOV Lanes		
HOV Restriction (2 or 3)		
Highway Free-Flow Speed	65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	31.0	31.0
Affected Area	31.0	31.0
Average Daily Traffic		i
Current	183,000	
	w/o Project	w/ Project
Base (Year 1)	189,512	189,512
Forecast (Year 20)	251,377	251,377
Average Hourly HOV Traffic (if HOV lanes)		0
Percent Traffic in Weave (if oper. improvement) Percent Trucks (include RVs, if applicable)	10%	10%
Truck Speed (if passing lane project)	10%	1076
Truck Speed (ii passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		-
	•	

1C HIGHWAY ACCIDENT DATA		
Actual 3-Year Accident Data for Facility		
	Count (No.)	Rate
Fatal Accidents	19	0.00
Injury Accidents	1194	0.19
Property Damage Only (PDO) Accidents	2467	0.40
Statewide Average for Highway Classificati	on	
	Existing	New
Accident Rate (per million vehicle-miles)		
Percent Fatal Accidents		
Percent Injury Accidents		

_		

rom Project Nomination Fa	act Sheet:	
Fiscal Year	r:	
Before 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 After		
TOTAL Escalation Factor	\$ 1,250,000 3.5%	

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project #	45b
		EA:	15113k
PROJECT:	TOS Improvements on I-580 corridor- ALA 238 Ramp Metering.	PPNO:	

1A PROJEC	PROJECT DATA		
Type of Project			
Select project type from list	Ramp Metering		
Project Location (enter 1 for So. Cal., 2 for No.	Cal., or 3 for rural)		
Length of Construction Period	2 years Existing		
Length of Peak Period(s) (up to 8 hrs)	4 hours		

lighway Design	Existing	New
Number of General Traffic Lanes	4	4
Number of HOV Lanes		
HOV Restriction (2 or 3)		
Highway Free-Flow Speed	65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	2.3	2.3
Affected Area	2.3	2.3
Average Daily Traffic		
Current	122,000	
	w/o Project	w/ Project
Base (Year 1)	126,341	126,341
Forecast (Year 20)	167,585	167,585
Average Hourly HOV Traffic (if HOV lanes)		0
Percent Traffic in Weave (if oper. improvement)		
Percent Trucks (include RVs, if applicable)	9%	9%
ruck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		
	-	

1C HIGHWAY ACCIDENT DATA					
Count (No.)	Rate				
	0.01				
	0.34				
	0.69				
Statewide Average for Highway Classification					
Existing	New				
	Count (No.)				

_		
		1

From Project Nomination Fact Sheet:				
Fiscal Yea	r:			
Before 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 After	\$ 315,000 \$ 315,000			
TOTAL Escalation Factor	\$ 630,000 3.5%			

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project #	45
		EA:	15192
DDO IECT:	TOS Improvements on L-580 corridor- ALA 580 Incident Management	DDNO:	

1A PROJECT	T DATA	
Type of Project		
Select project type from list	Incident Management	
Project Location (enter 1 for So. Cal., 2 for No. C	Cal., or 3 for rural)	2
Length of Construction Period	2 years	
Length of Peak Period(s) (up to 8 hrs)	Existing 4 hours	

•W
3
5
5
.8
.8
oject
192
014
)
%
Peak

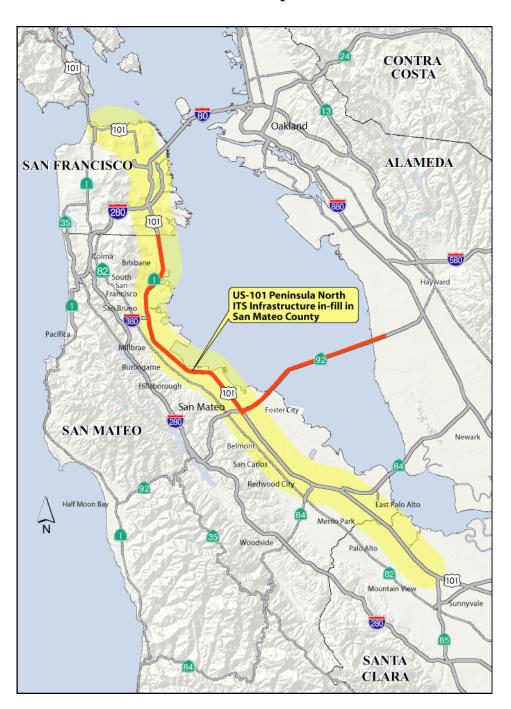
1C HIGHWAY ACCIDENT DATA				
Actual 3-Year Accident Data for Facility				
	Count (No.)	Rate		
Fatal Accidents		0.01		
Injury Accidents		0.34		
Property Damage Only (PDO) Accidents		0.69		
Statewide Average for Highway Classification	on			
	Existing	New		
Accident Rate (per million vehicle-miles)				
Percent Fatal Accidents				
Percent Injury Accidents				

From Project Nomination Fact Sheet:				
Fiscal Year	r:			
Before 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 After	\$ 3,475,000 \$ 3,475,000			
TOTAL Escalation Factor	\$ 6,950,000 3.5%			

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

## **Project Location Map**

US-101 Peninsula North ITS Infrastructure in San Mateo County



#### CMIA PROJECT NARRATIVE

#### US 101 Peninsula North ITS Infrastructure in-fill in San Mateo County

#### **Travel Corridor Description**

The US 101 Peninsula corridor extends from the Golden Gate Bridge to the junction with SR 85 in Mountain View, and traverses through San Francisco, San Mateo and Santa Clara Counties. From an Interregional Road System (IRRS) perspective, U.S. 101 is a "focus" route and a major north-south connector from the Silicon Valley in the South Bay to Marin and Sonoma Counties in the North Bay. It is primarily a freeway facility along the entire length of the corridor, with the exception of a small segment in San Francisco, where it is a conventional highway. The corridor intersects with several transbay crossings, including the San Mateo Bridge via SR 92.

#### **Project Function**

This project proposes to fill key traffic monitoring and motorist information gaps on one of the most congested corridors in the Bay Area. Although there has been a limited installation of ITS elements along the US 101 Peninsula corridor, the level of deployment is insufficient to comprehensively manage the system. The project would install Traffic Operations System (TOS) field elements on a 14-mile portion of the US-101 Peninsula corridor in San Mateo County. The limits of the project are from the San Francisco County line to the US 101/SR 92 interchange, as well as a 9-mile portion of SR 92 from the 92/101 interchange onto the San Mateo Bridge. TOS field elements included with this project include Closed Circut Television (CCTV) cameras, Changeable Message Signs (CMS), Highway Advisory Radios (HAR), Traffic Monitoring Stations (TMS), ramp metering equipment, and fiber optic cable communications trunk lines.

#### **Project Benefits**

#### A. Operations and Safety

TOS equipment provides benefits to motorists by increasing mobility and safety, and in improving the efficiency and productivity of the regional transportation system. This is consistent with the goals of the CMIA. This segment of US 101 covers the important northern portion of the 101 corridor, connecting the City of San Francisco with the San Francisco International Airport and the San Mateo Bridge. Thus, the ability to properly operate this segment of the corridor is not only important to daily management of the system, but will also be critical when major incidents require traffic diversions between the Bay Bridge and the San Mateo.

Average daily traffic volumes for the US 101 Peninsula corridor range from 64,000 in San Francisco to 249,000 vehicles, with truck traffic accounting for between 1.1% and 4.9% of the daily traffic. Currently, significant stretches of the corridor experience high levels of daily congestion, resulting in total corridor delays about 7600 vehicle-hours per day.

Reliable communications between the Transportation Management Center and the TOS field elements is needed for the effective operations of TOS elements. This is especially true in this corridor, where a number of system management strategies are poised to be implemented. These include the implementation of ramp metering, the development of a corridor incident management plan, integration with existing Smart Corridor efforts on El Camino Real (SR 82) which parallels the freeway, and the initiation of a smart parking project linked to two Caltrain rail stations. Because of these important initiatives, the availability of a fiber optic trunk line will reduce costs for sharing data with local agencies as well as provide a more reliable infrastructure providing higher bandwidth, better quality images, longer life cycle, and lower annual communication cost by eliminating dependency on outside market providers. San Mateo County, in particular, has been highly supportive of regional efforts to promote system management.

#### B. Air Quality

The nine-county region is also part of the San Francisco Bay Area Air Quality Basin. The region currently meets the national attainment standards for Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter ( $PM_{10}$ ), fine Particulate Matter ( $PM_{2.5}$ ), and lead. The area has been designated a marginal nonattainment area for Ozone based on current federal standards. Additionally, the region does not meet the current state standards for Ozone,  $PM_{10}$  and  $PM_{2.5}$ , but is in attainment for the other pollutants listed above. The projected reductions in daily vehicle hours of delay from this project will have a beneficial effect on air quality, as air pollutant emission reductions are realized from increased travel times and speeds.

In February 2005, the MTC adopted the 25-year Regional Transportation Plan (RTP). The transportation air quality conformity analysis of the Plan resulted in a positive conformity finding. This project is included in the current RTP and in the air quality conformity analysis, and is therefore part of a conforming transportation plan.

#### C. Access to Jobs, Housing, Markets, and Commerce

This corridor plays a critical role in regional and inter-regional traffic movements. US 101 is the main access route to San Francisco International Airport, the most heavily used airport in Northern California. From the Peninsula, it serves as a major route to Silicon Valley and to the Mineta San Jose International Airport. It links with the East Bay via the Dumbarton Bridge (SR 84), the San Mateo Bridge (SR 92), and the San Francisco-Oakland Bay Bridge, and provides access to the Port of Redwood City, and the Port of San Francisco. It also provides access to local streets, which includes commercial and residential developments, Stanford University, the Google campus, and many other business districts.

Per San Mateo County's Countywide Transportation Plan 2010, dated April 2001, a relatively high percentage (43%) of San Mateo County residents will commute to jobs in other counties. In 1990, this was the highest percentage of out-commuting for any county in the Bay Area. In 2010, as in 1990, a relatively high percentage of workers (36%) in the county will be non-resident workers who commute in from other counties. In 1990, this was the second highest percentage in in-commuting for any county in the

Bay Area. It is projected that by 2010 there will be a shortfall of 15,600 to 20,600 housing units in the county.

#### **Project Risks**

A Project Study Report for this project is expected to be complete in January 2007 and the project environmental phase will begin when funding becomes available. The scope of the project is well defined and risks to the scope, cost and schedule are anticipated to be low to medium. Potential risks may include environmental impacts and required mitigation, economic factors at the time of contract bidding, and access to the Caltrans fiber optics on the BART right-of-way. A project risk management plan will also be implemented to reduce and mitigate risks.

#### Corridor System Management Plan / Preserving Mobility Gains

Caltrans District 4 and the Metropolitan Transportation Commission (MTC) have recently launched a joint effort entitled the Freeway Performance Initiative. The intent of this effort is to advance a corridor based and performance driven Transportation Planning process, employing tested System Management principles and strategies to maximize the efficiency of the existing transportation infrastructure. A team of stakeholders within the corridor is now forming and a consultant team has been selected to begin a detailed performance assessment.

Implementation of the TOS enhancements included in this CMIA proposal are essential to the accomplishment of the region's and county's goals for system management. San Mateo County has been extremely supportive of system management strategies and has worked closely with Caltrans and MTC in a number of programs to preserve mobility in this corridor. A ramp metering feasibility study was completed in 2005, which led to an agreement between the county and the cities along the corridor to proceed with metering, as well as an MOU between the county and Caltrans. The first phase of ramp metering is scheduled to begin in late January 2007. A countywide Intelligent Transportation System Strategic Plan was completed in 2005, which is leading to an incident management plan for the Route 101 corridor, scheduled to begin development in Spring 2007. This plan will involve coordination with Smart Corridor improvements that have already been implemented on El Camino Real (SR 82) which parallels the freeway.

APPENDIX A CMIA Guidelines

#### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

#### **Project Nomination Fact Sheet**

Nominating Age	ncy: Caltrans		Fact Sheet Date:	01/08/07
Contact Person	Alan S. Chow			
Phone Number	(510) 286-4577	Fax Number	(510) 286-4773	
Email Address	alan _s_chow@dot.ca.gov			

County	Caltrans District	PPNO *	EA*	Region/MI	PO/ TIP ID*	Route / Corridor *	Post Mile Back *	Post Mile Ahead *
San Mateo	4	0676G	3A080K			101	11.7	26.2
San Mateo	4	0676G	3A080K			92	12.1	18.8
Alameda	4	0676G	3A080K			92	0.0	4.5
NOTE: PPNO & EA as	signed by Ca	Itrans. Region/I	MPO/TIP ID assig	ned by RTPA/M	PO. Route/Cor	ridor & Post Mile E	Back/Ahead used for S	tate Highway System
_egislative Districts	Senate:	8,10			Congressiona	al: 12, 13		
Logidian vo Diomoto	Assembly:	19, 18						
mplementing Agency	PA&ED:	Caltrans			PS&E: Ca	ltrans		
by component)	R/W:	Caltrans			CON: Ca	ltrans		
(b) component)	R/W:	Caltrans			CON: Ca	ltrans		
Project Title	US-101 P	eninsula No	orth ITS Infras	structure in-	fill in San M	lateo County		

Location - Project Limits - Description and Scope of Work (Provide a project location map on a separate sheet and attach to this form)
This project proposes to install Traffic Operations System (TOS) field equipment along Routes 101 & 92 in San Mateo County and Route 92 in Alameda County. The TOS field elements include Closed Circut Television (CCTV) Cameras, Changeable Message Signs (CMS), Highway Advisory Radios (HAR), Traffic Monitoring Stations (TMS), ramp metering equipment, and fiber optic cable communications trunk lines.

#### Description of Major Project Benefits

This project is expected to improve travel time reliability, enhance safety, reduce delays, reduce non-recurring congestion, and to better utilize the roadway capacity. The fiber optic cable communications trunk line will provide for enhanced communication between the TMC and field elements and allow for future upgrades and expansion. It will enable Caltrans to better manage the entire traffic management system by eliminating dependency on outside market provider's changing technology and cost fluctuations.

Expected Source(s) of Additional Funding Necessary to Complete Project - as Identified Under 'Additional Need'

Project Delivery Milestones (month/year):				
Project Study Report (PSR) complete	January 2007			
Notice of Preparation Document Type: CE				
Begin Circulation of Draft Environmental Document	April 2008			
Final Approval of Environmental Document	June 2008			
Completion of plans, specifications, and estimates	July 2011			
Right-of-way certfication	July 2011			
Ready for advertisement	January 2012			
Construction contract award	April 2012			
Construction contract acceptance	April 2014			

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

#### **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan**

(dollars in thousands and escalated)
Shaded fields are automatically calculated. Please do not fill these fields.

				Date: 8-Jan-07
County	CT District	PPNO *	EA*	Region/MPO/TIP ID *
San Mateo	4	0676G	3A080K	0
Project Title:	US-101 Penir	nsula North ITS Infrastructu	re in-fill in San Mateo County	

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	0	2,063	0	0	0	0	0	2,063
PS&E	0	0	963	963	962	0	0	2,888
R/W SUP (CT) *	0	0	138	138	137	0	0	413
CON SUP (CT) *	0	0	0	0	0	1,448	1,448	2,896
R/W	0	0	0	0	0	10	0	10
CON	0	0	0	0	0	20,630	0	20,630
TOTAL	0	2,063	1,101	1,101	1,099	22,088	1,448	28,900

Corridor Manageme	ent Improvem	ent Account	(CMIA) Progi	am				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)		2,063						2,063
PS&E			963	963	962			2,888
R/W SUP (CT) *			138	138	137			413
CON SUP (CT) *						1,448	1,448	2,896
R/W						10		10
CON						20,630		20,630
TOTAL	0	2,063	1,101	1,101	1,099	22,088	1,448	28,900

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Shaded fields are automatically calculated. Please do not fill these fields.

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

							Date:	8-Jan-07
County	CT District	PPN			EA*		Region/MP	PO/TIP ID *
San Mateo	4	067			3A080K		(	)
Project Title:	US-101 Penir				Mateo Count	ty		
* NOTE: PPNO and EA a	ssigned by Caltrans.	Region/MPO/TIP	ID assigned by R	TPA/MPO				
Funding Source:	T 5: T	07/00	00/00	00/40	10/11	44/46	10/10	T ( )
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) * CON SUP (CT) *								0
								0
R/W CON								0
TOTAL	0	0	0	0	0	0	0	0
TOTAL	U	U	U	U	U	U	U	U
Funding Source:								1
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	1 1101	07/00	00/03	03/10	10/11	11/12	12/13	10tai
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *	+							0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
101712		· ·					J	· ·
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Additional Fundin							100:-	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13+	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *	1							0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Shaded fields are automatically calculated. Please do not fill these fields.

District:	4	Project #	47a
		EA:	3A080K
PROJECT:	TOS improvements on 101 (EA#3A080K, 2A790K, 3A650K) - SM 101 Traveler Information	PPNO:	

1A PROJECT DATA		
Type of Project		
Select project type from list	Traveler Information	
Project Location (enter 1 for So. Cal., 2 for No.	Cal., or 3 for rural)	
Length of Construction Period	2 years	
Length of Peak Period(s) (up to 8 hrs)	Existing 4 hours	

1B HIGHWAY DESIGN AND TRA	FFIC DAT	Ά
Highway Design	Existing	New
Number of General Traffic Lanes	8	8
Number of HOV Lanes		
HOV Restriction (2 or 3)		
Highway Free-Flow Speed	65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	14.5	14.5
Affected Area	14.5	14.5
Average Daily Traffic		
Current	204,000	
	w/o Project	w/ Project
Base (Year 1)	211,259	211,259
Forecast (Year 20)	280,223	280,223
Average Hourly HOV Traffic (if HOV lanes)		0
Percent Traffic in Weave (if oper. improvement)		
Percent Trucks (include RVs, if applicable)	9%	9%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)	Ü	
	1	
-		
	1	1

1C HIGHWAY ACCIDENT DATA			
Actual 3-Year Accident Data for Facility			
-	Count (No.)	Rate	
Fatal Accidents		0.01	
Injury Accidents		0.34	
Property Damage Only (PDO) Accidents		0.69	
Statewide Average for Highway Classification	on		
	Existing	New	
Accident Rate (per million vehicle-miles)			
Percent Fatal Accidents			
Percent Injury Accidents			

	I	
·		

rom Project Nomination Fact Sheet:				
Fiscal Year:				
Before 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 After	\$ 4,790,000			
TOTAL \$ 9,580,000 Escalation Factor 3.5%				

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project #	47b1
	·	EA:	3A080K
DDO IECT:	TOS improvements on 101 (FA#3A080K, 2A790K, 3A650K) - SM 92 Incident Management	DDNO:	

1A PROJECT DATA			
Type of Project			
Select project type from list	Incident Management		
Project Location (enter 1 for So. Cal., 2 for No. 0	Cal., or 3 for rural)		
Length of Construction Period	2 years		
	Existing		
Length of Peak Period(s) (up to 8 hrs)	4 hours		

1B HIGHWAY DESIGN AND TRAI	FFIC DAT	Ά
Highway Design	Existing	New
Number of General Traffic Lanes	6	6
Number of HOV Lanes		
HOV Restriction (2 or 3)		
Highway Free-Flow Speed	55	55
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	6.7	6.7
Affected Area	6.7	6.7
Average Daily Traffic  Current	119,000	
Current	w/o Project	w/ Project
Base (Year 1)	123,235	123,235
Forecast (Year 20)	163,464	163,464
Average Hourly HOV Traffic (if HOV lanes)	,	0
Percent Traffic in Weave (if oper. improvement)		
Percent Trucks (include RVs, if applicable)	9%	9%
Truck Speed (if passing lane project)		
0. 0		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		
-		

1C HIGHWAY ACCIDENT DATA			
Actual 3-Year	Accident Data for Facility		
		Count (No.)	Rate
Fatal Accide	ents		0.01
Injury Accid	ents		0.34
Property Da	amage Only (PDO) Accidents		0.69
Statewide Ave	erage for Highway Classifi	cation	
		Existing	New
Accident Ra	ate (per million vehicle-miles)		
Percent Fat	al Accidents		
Percent Inju	ıry Accidents		

	]

From Project Nomination Fact Sheet:					
Fiscal Yea	Fiscal Year:				
	\$ 2,320,000 \$ 2,320,000				
After TOTAL Escalation Factor	\$ 4,640,000 3.5%				

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project #	47b2
		EA:	3A080K
PROJECT:	TOS improvements on 101 (EA#3A080K, 2A790K, 3A650K) - SM 92 Traveler Information	PPNO:	

PROJECT DATA			
Type of Project			
Select project type from list	Traveler Information		
Project Location (enter 1 for So. Cal., 2 for No. 0	Cal., or 3 for rural)		
Length of Construction Period	2 years		
Length of Peak Period(s) (up to 8 hrs)	Existing 4 hours		

6.7 6.7 6.7 6.7 6.7 6.7 6.7 6.7 6.7 6.7	Number of General Traffic Lanes   6   6   6	1B HIGHWAY DESIGN AND TRAI	FFIC DAT	Ά
55 55 35 35 6.7 6.7 6.7 6.7  119,000 w/o Project w/ Project 123,235 163,464 163,44 0 0 nent) 9% 9% Peak Non-Pererramp proj.) 0 0	Number of HOV Lanes	Highway Design	Existing	New
amp proj.) 35 35 6.7 6.7 6.7 6.7 6.7 6.7 6.7 6.7 119,000 w/o Project w/ Project 123,235 123,23 163,464 163,46 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Hov Restriction (2 or 3)		6	6
amp proj.) 35 35 6.7 6.7 6.7 6.7 6.7 6.7 6.7 6.7 119,000 w/o Project w/ Project 123,235 123,23 163,464 163,46 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Highway Free-Flow Speed   55   55   35   35   35   35   35   3	Number of HOV Lanes		
amp proj.) 35 35 6.7 6.7 6.7 6.7 6.7 6.7 6.7 6.7 119,000 w/o Project w/ Project 123,235 123,23 163,464 163,46 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ramp Design Speed (if aux. lane/off-ramp proj.)   35   35	HOV Restriction (2 or 3)		
amp proj.) 35 35 6.7 6.7 6.7 6.7 6.7 6.7 6.7 6.7 119,000 w/o Project w/ Project 123,235 123,23 163,464 163,46 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ramp Design Speed (if aux. lane/off-ramp proj.)   35   35			
amp proj.) 35 35 6.7 6.7 6.7 6.7 6.7 6.7 6.7 6.7 119,000 w/o Project w/ Project 123,235 123,23 163,464 163,46 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ramp Design Speed (if aux. lane/off-ramp proj.)   35   35	Highway Free-Flow Speed	55	55
6.7 6.7 6.7 6.7 6.7 6.7 6.7 6.7 6.7 6.7	Highway Segment			
119,000 w/ Project w/ Project 123,235 163,464 163,464 163,464 164,464 165,464	Affected Area 6.7 6.7  Average Daily Traffic  Current  119,000  w/o Project  123,235 123,235  Forecast (Year 20) 163,464 163,464  Average Hourly HOV Traffic (if HOV lanes) 0  Percent Traffic in Weave (if oper. improvement) 0  Percent Trucks (include RVs, if applicable) 9% 9%  Truck Speed (if passing lane project) 0  On-Ramp Volume 100  Hourly Ramp Volume 6 Peak Non-Peak Non-Peak Non-Peak Hourly Ramp Volume 100  Hourly Ramp Volume 100  On-Ramp		6.7	6.7
w/o Project w/ Project 123,235 123,2: 163,464 163,44 ) 0 hent) 9% 9% ramp proj.) 0 0	Current   119,000			
w/o Project w/ Project 123,235 123,2: 163,464 163,44 ) 0 hent) 9% 9% ramp proj.) 0 0	Current   119,000			
w/o Project w/ Project 123,235 123,2: 163,464 163,44 ) 0 hent) 9% 9% ramp proj.) 0 0	Base (Year 1)	•	440.000	1
123,235 123,23 163,464 163,46 0 0 9% 9% 9% Peak Non-Pe ramp proj.) 0 0 0	Base (Year 1)   123,235   123,235     Forecast (Year 20)   163,464   163,464     Average Hourly HOV Traffic (if HOV lanes)   0   Percent Traffic in Weave (if oper. improvement)     Percent Trucks (include RVs, if applicable)   9%   9%     Truck Speed (if passing lane project)   0   On-Ramp Volume	Current		
163,464 163,46 0 enent) 9% 9% 9% Peak Non-Pe ramp proj.) 0 0	Forecast (Year 20)   163,464   163,464     Average Hourly HOV Traffic (if HOV lanes)   0     Percent Traffic in Weave (if oper. improvement)     Percent Trucks (include RVs, if applicable)   9%   9%     Truck Speed (if passing lane project)   9%   Peak   Non-Peak     Hourly Ramp Volume   Peak   Non-Peak   Non-Peak     Hourly Ramp Volume (if aux. lane/on-ramp proj.)   0   0	5 0/ 1)		
0   0   0	Average Hourly HOV Traffic (if HOV lanes)  Percent Traffic in Weave (if oper. improvement)  Percent Trucks (include RVs, if applicable)  9%  9%  9%  On-Ramp Volume  Hourly Ramp Volume (if aux. lane/on-ramp proj.)  0			
Peak Non-Peramp proj.) 0 0	Percent Traffic in Weave (if oper. improvement)  Percent Trucks (include RVs, if applicable)  9%  9%  Fruck Speed (if passing lane project)  On-Ramp Volume Hourly Ramp Volume (if aux. lane/on-ramp proj.)  0  0		103,404	
9% 9%  Peak Non-Pe ramp proj.) 0 0	Percent Trucks (include RVs, if applicable)         9%         9%           Truck Speed (if passing lane project)         9%         9%           On-Ramp Volume Hourly Ramp Volume (if aux. lane/on-ramp proj.)         0         0			U
Peak Non-Pe ramp proj.) 0 0	Truck Speed (if passing lane project)  On-Ramp Volume Hourly Ramp Volume (if aux. lane/on-ramp proj.)  0 0		Ω0/2	Ω9/.
ramp proj.) 0 0	On-Ramp Volume Hourly Ramp Volume (if aux. lane/on-ramp proj.)  O		370	370
ramp proj.) 0 0	Hourly Ramp Volume (if aux. lane/on-ramp proj.) 0	Track Opeca (ii passing lane project)		
		On-Ramp Volume	Peak	Non-Peak
: \	Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		0	0
ramp proj.)		Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		
таттр ргој.)		Percent Trucks (include RVs, if applicable) Truck Speed (if passing lane project)  On-Ramp Volume Hourly Ramp Volume (if aux. lane/on-ramp proj.)	Pe	eak

(10	1C HIGHWAY ACCIDENT DATA				
A	Actual 3-Year Accident Data for Facility				
		Count (No.)	Rate		
	Fatal Accidents		0.01		
	Injury Accidents		0.34		
	Property Damage Only (PDO) Accidents		0.69		
S	Statewide Average for Highway Classification				
		Existing	New		
	Accident Rate (per million vehicle-miles)				
	Percent Fatal Accidents				
	Percent Injury Accidents				

·	

From Project Nomination Fa	From Project Nomination Fact Sheet:			
Fiscal Yea	r:			
Before 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 After	\$ 1,710,000 \$ 1,710,000			
TOTAL Escalation Factor	\$ 3,420,000 3.5%			

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project #	47c1
		EA:	3A080K
PROJECT:	TOS improvements on 101 (EA#3A080K, 2A790K, 3A650K) - SM 92 Ramp Metering	PPNO:	

PROJECT DATA			
Type of Project			
Select project type from list	Ramp Metering		
Project Location (enter 1 for So. Cal., 2 for No.	Cal., or 3 for rural)		
Length of Construction Period	2 years		
Length of Peak Period(s) (up to 8 hrs)	Existing 4 hours		

1B HIGHWAY DESIGN AND TRAFFIC DATA			
Highway Design	Existing	New	
Number of General Traffic Lanes	2	2	
Number of HOV Lanes			
HOV Restriction (2 or 3)			
HOV RESTRICTION (2 of 3)			
Highway Free-Flow Speed	45	45	
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35	
Length (in miles) Highway Segment	4.5	4.5	
Affected Area	4.5	4.5	
Average Daily Traffic			
Current	25,000		
	w/o Project	w/ Project	
Base (Year 1)	25,890	25,890	
Forecast (Year 20)	34,341	34,341	
Average Hourly HOV Traffic (if HOV lanes)		0	
Percent Traffic in Weave (if oper. improvement)			
Percent Trucks (include RVs, if applicable)	9%	9%	
Truck Speed (if passing lane project)			
O . B V . I			
On-Ramp Volume	Peak	Non-Peak	
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0	
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)			
-			

1C HIGHWAY ACCIDENT DATA				
Actual 3-Year Accident Data for Facility				
	Count (No.)	Rate		
Fatal Accidents		0.01		
Injury Accidents		0.34		
Property Damage Only (PDO) Accidents		0.69		
Statewide Average for Highway Classification  Existing New				
Accident Rate (per million vehicle-miles)				
Percent Fatal Accidents				
Percent Injury Accidents				

From Project Nomination Fa	act Sheet:	
Fiscal Yea	r:	
Before 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 After	\$ 3,005,000 \$ 3,005,000	
TOTAL Escalation Factor	\$ 6,010,000 3.5%	

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project #	47c2
	<del></del>	EA:	3A080K
PROJECT:	TOS improvements on 101 (FA#3A080K 2A790K 3A650K) - SM 92 Incident Management	PPNO:	

1A PROJECT DATA								
Type of Project								
Select project type from list	Incident Management							
Project Location (enter 1 for So. Cal., 2 for No.	Cal., or 3 for rural)							
Length of Construction Period	2 years							
	Existing							
Length of Peak Period(s) (up to 8 hrs)	4 hours							

1B HIGHWAY DESIGN AND TRAI	FIC DAT	Α
Highway Design	Existing	New
Number of General Traffic Lanes	2	2
Number of HOV Lanes		
HOV Restriction (2 or 3)		
Highway Free-Flow Speed	45	45
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	4.5	4.5
Affected Area	4.5	4.5
Allected Alea	4.5	4.5
Average Daily Traffic		
Current	25,000	
Carron	w/o Project	w/ Project
Base (Year 1)	25,890	25,890
Forecast (Year 20)	34,341	34,341
Average Hourly HOV Traffic (if HOV lanes)		0
Percent Traffic in Weave (if oper. improvement)		
Percent Trucks (include RVs, if applicable)	9%	9%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		

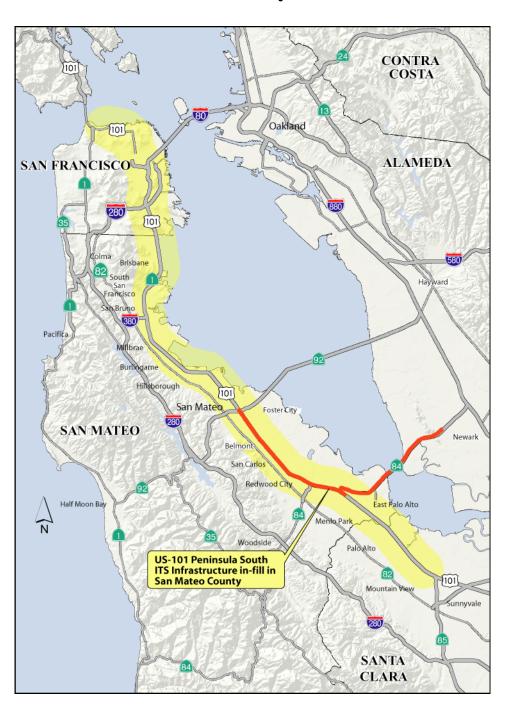
1C HIGHWAY ACCIDENT DATA							
Actual 3-Year Accident Data for Facility							
	Count (No.)	Rate					
Fatal Accidents		0.01					
Injury Accidents		0.34					
Property Damage Only (PDO) Accidents		0.69					
Statewide Average for Highway Classifica							
	Existing	New					
Accident Rate (per million vehicle-miles)							
Percent Fatal Accidents							
Percent Fatal Accidents							

From Project Nomination Fa	act Sheet:
Fiscal Yea	r:
Before 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 After	\$ 2,625,000 \$ 2,625,000
TOTAL Escalation Factor	\$ 5,250,000 3.5%

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

# **Project Location Map**

US-101 Peninsula South ITS Infrastructure in San Mateo County



### CMIA PROJECT NARRATIVE

## US 101 Peninsula South ITS Infrastructure in-fill in San Mateo County

# **Travel Corridor Description**

The US101 Peninsula corridor extends from the Golden Gate Bridge to the junction with SR 85 in Mountain View, and traverses through San Francisco, San Mateo and Santa Clara Counties. From an Interregional Road System (IRRS) perspective, US 101 is a "focus" route and a major north-south connector from the Silicon Valley in the South Bay to Marin and Sonoma Counties in the North Bay. It is primarily a freeway facility along the entire length of the corridor, with the exception of a small segment in San Francisco, where it is a conventional highway. The corridor intersects with several transbay crossings, including the Dumbarton Bridge via the Willow Road interchange.

# **Project Function**

This project proposes to fill key traffic monitoring and motorist information gaps on one of the most congested corridors in the Bay Area. Although there is a partial installation of ITS elements along the US 101 Peninsula corridor, the level of deployment is insufficient to comprehensively manage the system. This project would install Traffic Operations System (TOS) field elements on a 9-mile portion of the US 101 Peninsula corridor in San Mateo County. The limits of the project are from the US 101/SR 92 interchange to the US 101/SR 84 interchange, and includes a segment of SR 84 onto the Dumbarton Bridge. TOS field elements included with this project include Closed Circut Television (CCTV) cameras, Changeable Message Signs (CMS), Highway Advisory Radios (HAR), Extinguishable Message Signs (EMS), Traffic Monitoring Stations (TMS), and fiber optic cable communications trunk lines.

## **Project Benefits**

### A. Operations and Safety

TOS equipment provides benefits to motorists by increasing mobility and safety, and in improving the efficiency and productivity of the regional transportation system. This is consistent with the goals of the CMIA. This segment of US 101 is the central portion of the 101 Peninsula Corridor, and connects the two southerly crossings of San Francisco Bay via the San Mateo Bridge and the Dumbarton Bridge. Thus, it is essential that the capability exists to manage this corridor efficiently on a day-to-day basis, but also when major incidents occur on one of the bridges.

Average daily traffic volumes for the US-101 Peninsula corridor range from 64,000 to 249,000 vehicles, with truck traffic accounting for between 1.1% and 4.9% of the daily traffic. Currently, significant stretches of the corridor experience high levels of daily congestion, resulting in total corridor delays about 7600 vehicle-hours per day.

Reliable communications between the Transportation Management Center and the TOS field elements is needed for the effective operations of TOS elements. This is especially true in this corridor, where a number of system management strategies are poised to be

implemented. These include the implementation of ramp metering, the development of a corridor incident management plan, integration with existing Smart Corridor efforts on El Camino Real (SR 82) which parallels the freeway, the initiation of a smart parking project linked to two Caltrain rail station. Because of these important initiatives, the availability of a fiber optic trunk line will reduce costs for sharing data with local agencies as well as provide a more reliable infrastructure providing higher bandwidth, better quality images, longer life cycle, and lower annual communication cost by eliminating dependency on outside market providers. San Mateo County, in particular, has been highly supportive of regional efforts to promote system management.

## B. Air Quality

The nine-county region is also part of the San Francisco Bay Area Air Quality Basin. The region currently meets the national attainment standards for Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter ( $PM_{10}$ ), fine Particulate Matter ( $PM_{2.5}$ ), and lead. The area has been designated a marginal nonattainment area for Ozone based on current federal standards. Additionally, the region does not meet the current state standards for Ozone,  $PM_{10}$  and  $PM_{2.5}$ , but is in attainment for the other pollutants listed above. The projected reductions in daily vehicle hours of delay from this project will have a beneficial effect on air quality, as air pollutant emission reductions are realized from increased travel times and speeds.

In February 2005, the MTC adopted the 25-year Regional Transportation Plan (RTP). The transportation air quality conformity analysis of the Plan resulted in a positive conformity finding. This project is included in the current RTP and in the air quality conformity analysis, and is therefore part of a conforming transportation plan.

## C. Access to Jobs, Housing, Markets, and Commerce

This corridor plays a critical role in regional and inter-regional traffic movements. In San Mateo County, US 101 is the main access route toSan Francisco International Airport, the most heavily used airport in Northern California. From the Peninsula, it serves as a major route to Silicon Valley and to the Mineta San Jose International Airport. It links with the East Bay via the Dumbarton Bridge (SR 84), the San Mateo Bridge (SR 92), and the San Francisco-Oakland Bay Bridge, and provides access to the Port of Redwood City, and the Port of San Francisco. It also provides access to Stanford University, the Google campus, and many other residential and business districts.

Per San Mateo County's Countywide Transportation Plan 2010, dated April 2001, a relatively high percentage (43%) of San Mateo County residents will commute to jobs in other counties. In 1990, this was the highest percentage of out-commuting for any county in the Bay Area. In 2010, as in 1990, a relatively high percentage of workers (36%) in the county will be non-resident workers who commute in from other counties. In 1990, this was the second highest percentage in in-commuting for any county in the Bay Area. It is projected that by 2010 there will be a shortfall of 15,600 to 20,600 housing units in the county.

# **Project Risks**

A Project Study Report for this project is expected to be complete in January 2007 and the project environmental phase will begin when funding becomes available. The scope of the project is well defined and risks to the scope, cost and schedule are anticipated to be low to medium. Potential risks may include environmental impacts and required mitigation and economic factors at the time of contract bidding. Fluctuations in the supply of construction materials and the cost of labor for installing TOS equipment, and the limited number of qualified bidders for installing fiber optics communications equipment could also affect cost and schedule. A project risk management plan will also be implemented to reduce and mitigate risks.

# Corridor System Management Plan / Preserving Mobility Gains

Caltrans District 4 and the Metropolitan Transportation Commission have recently launched a joint effort entitled the Freeway Performance Initiative. The intent of this effort is to advance a corridor based and performance driven Transportation Planning process, employing tested System Management principles and strategies to maximize the efficiency of the existing transportation infrastructure. A team of stakeholders within the corridor is now forming and a consultant team has been selected to begin a detailed performance assessment.

Implementation of the TOS enhancements included in this CMIA proposal are crucial to the accomplishment of the region's and county's goals for system management. San Mateo County has been extremely supportive of system management strategies and has worked closely with Caltrans and MTC in a number of programs to preserve mobility in this corridor. A ramp metering feasibility study was completed in 2005, which led to an agreement between the county and the cities along the corridor to proceed with metering, as well as an MOU between the county and Caltrans. The first phase of ramp metering, which matches the limits of this proposed project, is scheduled to begin in late January 2007. A county-wide Intelligent Transportation System Strategic Plan was completed in 2005, which is leading to an incident management plan for the Route 101 corridor, scheduled to begin development in Spring 2007. This plan will involve coordination with Smart Corridor improvements that have already been implemented on El Camino Real (SR 82) which parallels the freeway.

APPENDIX A CMIA Guidelines

## **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

# **Project Nomination Fact Sheet**

Nominating Age	ncy: Caltrans		Fact Sheet Date:	01/08/07
Contact Person	Alan S. Chow			
Phone Number	(510) 286-4577	Fax Number	(510) 286-4773	
Email Address	alan _s_chow@dot.ca.gov			

County	Caltrans District	PPNO *	EA * Region/MF		Region/MPO/ TIP ID*		Post Mile Back *	Post Mile Ahead *
San Mateo	4	N/A	3A650K			101	3.2	12.0
Alameda	4	N/A	3A650K			84	0.0	3.8
San Mateo	4	N/A	3A650K			84	25.7	30.2
* NOTE: PPNO & EA as	signed by Ca	altrans. Region/l	MPO/TIP ID assig	ned by RTPA/M	PO. Route/Corri	dor & Post Mile E	Back/Ahead used for S	tate Highway System
Legislative Districts	Senate: 11, 10 Congressional: 12, 13, 14							
Logidian vo Biomoto	Assembly:	19, 20, 21						
Implementing Agency	PA&ED:	Caltrans			PS&E: Calt	rans		
(by component)	R/W:	Caltrans			CON: Calt	rans		
Project Title	US-101 F	Peninsula So	outh ITS Infra	structure in-	fill in San Ma	ateo County		

Location - Project Limits - Description and Scope of Work (Provide a project location map on a separate sheet and attach to this form)
This project proposes to install Traffic Operations System (TOS) field equipment along Routes 101 & 84 in San Mateo County and
Route 84 in Alameda County. The TOS field elements include Closed Circuit Television (CCTV) Cameras, Changeable Message
Signs (CMS), Highway Advisory Radios (HAR), Extinguishable Message Signs (EMS), Traffic Monitoring Stations (TMS), and fiber
optic cable communications trunk lines.

# Description of Major Project Benefits

This project is expected to improve travel time reliability, enhance safety, reduce delays, reduce non-recurring congestion, and to better utilize the roadway capacity. The fiber optic cable communications trunk line will provide for enhanced communication between the TMC and field elements and allow for future upgrades and expansion. It will enable Caltrans to better manage the entire traffic management system by eliminating dependency on outside market provider's changing technology and cost fluctuations.

Expected Source(s) of Additional Funding Necessary to Complete Project - as Identified Under 'Additional Need'

Project Delivery Milestones (month/year):				
Project Study Report (PSR) complete	January 2007			
Notice of Preparation Document Type: CE				
Begin Circulation of Draft Environmental Document	August 2008			
Final Approval of Environmental Document	October 2008			
Completion of plans, specifications, and estimates	February 2011			
Right-of-way certfication	February 2011			
Ready for advertisement	August 2011			
Construction contract award	December 2011			
Construction contract acceptance	December 2013			

NOTE: The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

### CORRIDOR MOBILITY IMPROVEMENT ACCOUNT **Project Nomination Fact Sheet - Project Cost and Funding Plan**

(dollars in thousands and escalated)
Shaded fields are automatically calculated. Please do not fill these fields.

				Date:	8-Jan-07		
County	CT District	PPNO *	EA*	Region/MP0	D/TIP ID *		
San Mateo	4	N/A	3A650K	0			
Project Title: US-101 Peninsula South ITS Infrastructure in-fill in San Mateo County							

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	ject Cost							Project
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	0	747	747	0	0	0	0	1,494
PS&E	0	0	697	697	697	0	0	2,091
R/W SUP (CT) *	0	0	100	100	99	0	0	299
CON SUP (CT) *	0	0	0	0	0	1,030	1,036	2,066
R/W	0	0	0	0	10	0	0	10
CON	0	0	0	0	14,940	0	0	14,940
TOTAL	0	747	1,544	797	15,746	1,030	1,036	20,900

Corridor Manageme	ent Improvem	ent Account	(CMIA) Progi	ram				
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)		747	747					1,494
PS&E			697	697	697			2,091
R/W SUP (CT) *			100	100	99			299
CON SUP (CT) *						1,030	1,036	2,066
R/W					10			10
CON					14,940			14,940
TOTAL	0	747	1,544	797	15,746	1,030	1,036	20,900

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

		, , ,						
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Shaded fields are automatically calculated. Please do not fill these fields.

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

							Date:	8-Jan-07
County	CT District	PPN			EA*		Region/MF	O/TIP ID *
San Mateo	4	N/			3A650K		(	)
Project Title:	US-101 Penin				n Mateo Coun	ty		
* NOTE: PPNO and EA a	ssigned by Caltrans.	Region/MPO/TIP	ID assigned by R	TPA/MPO				
Funding Source:	T 5: T	07/00	00/00	00/40	10/11	44/46	10/10	T
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	+							0
PS&E								0
R/W SUP (CT) * CON SUP (CT) *								0
								0
R/W CON								0
TOTAL	0	0	0	0	0	0	0	0
TOTAL	U	U	U	U	U	U	U	U
Funding Source:								1
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	1 1101	01/00	00/03	03/10	10/11	11/12	12/10	0
PS&E	+						<del> </del>	0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
							J	
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
Additional Fundin							1	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13+	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *	1							0
R/W	1							0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Shaded fields are automatically calculated. Please do not fill these fields.

District:	4	Project # EA:	49a 3A650K
PROJECT:	TOS improvements on 101 (EA#3A080K, 2A790K, 3A650K) - ALA 84	PPNO:	SAUSUK

PROJECT DATA					
Type of Project					
Select project type from list	Incident Management				
Project Location (enter 1 for So. Cal., 2 for No.	Cal., or 3 for rural)				
Length of Construction Period	2 years				
Length of Peak Period(s) (up to 8 hrs)	Existing hours				

1B HIGHWAY DESIGN AND TRAI	FFIC DAT	Α
Highway Design	Existing	New
Number of General Traffic Lanes	6	6
Number of HOV Lanes		
HOV Restriction (2 or 3)		
Highway Free-Flow Speed	55	55
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	3.8	3.8
Affected Area	3.8	3.8
	-	
Average Daily Traffic		
Current	81,000	
	w/o Project	w/ Project
Base (Year 1)	83,882	83,882
Forecast (Year 20)	111,265	111,265
Average Hourly HOV Traffic (if HOV lanes)		0
Percent Traffic in Weave (if oper. improvement)		
Percent Trucks (include RVs, if applicable)	9%	9%
Truck Speed (if passing lane project)		
O . B V. I		Non-Peak
On-Ramp Volume	Peak	
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		
		1
		1
-		
-		

	Count (No.)	Rate
Fatal Accidents		0.01
Injury Accidents		0.34
Property Damage Only (PDO) Accidents		0.69
tatewide Average for Highway Classifica	tion	
tatewide Average for Highway Classifica	tion Existing	New
tatewide Average for Highway Classifica Accident Rate (per million vehicle-miles)		New
tatewide Average for Highway Classifica Accident Rate (per million vehicle-miles) Percent Fatal Accidents		New

From Project Nomination Fa	act Sheet:	
Fiscal Yea	r:	
After TOTAL	\$ 1,775,000 \$ 3,550,000	
Escalation Factor	3.5%	

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project # EA:	49b <sup>-</sup> 3A650l
PROJECT:	TOS improvements on 101 (EA#3A080K, 2A790K, 3A650K) - SM 84 Incident Management	PPNO:	

1A PROJECT DATA		
Type of Project		
Select project type from list	Incident Management	
Project Location (enter 1 for So. Cal., 2 for No.	Cal., or 3 for rural)	
Length of Construction Period	2 years	
Length of Peak Period(s) (up to 8 hrs)	Existing 4 hours	

1B HIGHWAY DESIGN AND TRAI	FIC DAT	Α
Highway Design	Existing	New
Number of General Traffic Lanes	6	6
Number of HOV Lanes		
HOV Restriction (2 or 3)		
Highway Free-Flow Speed	55	55
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	4.5	4.5
Affected Area	4.5	4.5
Average Daily Traffic		
Current	57,000	
	w/o Project	w/ Project
Base (Year 1)	59,028	59,028
Forecast (Year 20)	78,298	78,298
Average Hourly HOV Traffic (if HOV lanes)		0
Percent Traffic in Weave (if oper. improvement)		
Percent Trucks (include RVs, if applicable)	9%	9%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		
<u> </u>		

Actual 3-Year Accident Data for Facility		
	Count (No.)	Rate
Fatal Accidents		0.01
Injury Accidents		0.34
Property Damage Only (PDO) Accidents		0.69
Statewide Average for Highway Classifica		
Assident Date (non million vehicle miles)	Existing	New
Accident Rate (per million vehicle-miles)		
Percent Fatal Accidents Percent Injury Accidents		

<u> </u>		
<u> </u>		
L		

rom Project Nomination Fact Sheet:		
Fiscal Yea	r:	
Before		
2007-08		
2008-09		
2009-10		
2010-11		
2011-12	\$ 1,560,000	
2012-13	\$ 1,560,000	
After		
		•
TOTAL	\$ 3,120,000	
Escalation Factor	3.5%	
•		•

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project #	49b2
		EA:	3A650k
PROJECT:	TOS improvements on 101 (EA#3A080K, 2A790K, 3A650K) - SM 84 Traveler Information	PPNO:	

1A PROJECT DATA		
Type of Project		
Select project type from list	Traveler Information	
Project Location (enter 1 for So. Cal., 2 for No.	Cal., or 3 for rural)	
Length of Construction Period	2 years	
Length of Peak Period(s) (up to 8 hrs)	Existing 4 hours	

1B HIGHWAY DESIGN AND TRAF	FIC DAT	Ά
Highway Design	Existing	New
Number of General Traffic Lanes	6	6
Number of HOV Lanes		
HOV Restriction (2 or 3)		
Highway Free-Flow Speed	55	55
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	4.5	4.5
Affected Area	4.5	4.5
(		
Average Daily Traffic		
Current	57,000	
	w/o Project	w/ Project
Base (Year 1)	59,028	59,028
Forecast (Year 20)	78,298	78,298
Average Hourly HOV Traffic (if HOV lanes)		0
Percent Traffic in Weave (if oper. improvement)		
Percent Trucks (include RVs, if applicable)	9%	9%
Truck Speed (if passing lane project)		
On Born Values		
On-Ramp Volume	Peak	Non-Peak 0
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	U
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		
		1
	<u> </u>	

NT DATA	
Court (No.)	Dete
Count (No.)	Rate
	0.01
	0.34
	0.69
ion Existing	New
	Count (No.)

rom Project Nomination Fact Sheet:			
Fiscal Year	r:		
Before 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 After	\$ 1,725,000 \$ 1,725,000		
TOTAL Escalation Factor	\$ 3,450,000 3.5%		

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District:	4	Project # EA:	49c
PROJECT:	TOS improvements on 101 (EA#3A080K, 2A790K, 3A650K) - SM 101	PPNO:	

1A PROJECT DATA							
Type of Project							
Select project type from list	Incident Management						
Project Location (enter 1 for So. Cal., 2 for No.	Cal., or 3 for rural)						
Length of Construction Period	2 years Existing						
Length of Peak Period(s) (up to 8 hrs)	4 hours						

lighway Design  Number of General Traffic Lanes  Number of HOV Lanes  HOV Restriction (2 or 3)	Existing 8	New 8
Number of HOV Lanes	U	
, a second		
Highway Free-Flow Speed	65	65
Ramp Design Speed (if aux. lane/off-ramp proj.)	35	35
Length (in miles) Highway Segment	8.8	8.8
Affected Area	8.8	8.8
Average Daily Traffic		
Current	206,000	
	w/o Project	w/ Project
Base (Year 1)	213,331	213,331
Forecast (Year 20)	282,971	282,971
Average Hourly HOV Traffic (if HOV lanes)		0
Percent Traffic in Weave (if oper. improvement)		
Percent Trucks (include RVs, if applicable)	9%	9%
Truck Speed (if passing lane project)		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		

Actual 3-Year Accident Data for Facility		
	Count (No.)	Rate
Fatal Accidents		0.01
Injury Accidents		0.34
Property Damage Only (PDO) Accidents		0.69
Statewide Average for Highway Classifica	tion	
Statewide Average for Highway Classifica	tion Existing	New
Statewide Average for Highway Classifica Accident Rate (per million vehicle-miles)		New
Statewide Average for Highway Classifica  Accident Rate (per million vehicle-miles)  Percent Fatal Accidents		New

_		
_		
_		
-		

From Project Nomination Fa	act Sheet:	
Fiscal Yea	r:	
Before		
2007-08		
2008-09		
2009-10		
2010-11		
2011-12	\$ 2,355,000	
2012-13	\$ 2,355,000	
After		
TOTAL	\$ 4,710,000	
Escalation Factor	3.5%	

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

District: PROJECT:	TOS improvements on 101 (EA#3A080K, 2A790 Traveler Information	K, 3A65	50K) - SM 101	Project # EA:
1A	PROJECT DATA		1C HIGHWAY ACC	IDENT DATA
. ,	ect type from list  Traveler Information  (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural)  2		Actual 3-Year Accident Data for Facilia Fatal Accidents Injury Accidents	Count (No.)
Length of Const	Existing		Property Damage Only (PDO) Accidents  Statewide Average for Highway Class.	
Lengul Of Peak P	Period(s) (up to 8 hrs) 4 hours		Accident Rate (per million vehicle-miles)	

8

65

35

8.8

8.8

9%

65

8.8

8.8

206,000

213,331 213,331

282,971 282,971

**HIGHWAY DESIGN AND TRAFFIC DATA** 

(1B)

Highway Design

Average Daily Traffic

On-Ramp Volume

Number of General Traffic Lanes

Ramp Design Speed (if aux. lane/off-ramp proj.)

Current

Affected Area

Base (Year 1)
Forecast (Year 20)

Hourly Ramp Volume (if aux. lane/on-ramp proj.) Metering Strategy (1, 2, 3, or D, if on-ramp proj.)

Length (in miles) Highway Segment

Average Hourly HOV Traffic (if HOV lanes)
Percent Traffic in Weave (if oper. improvement)

Percent Trucks (include RVs, if applicable)
Truck Speed (if passing lane project)

Number of HOV Lanes HOV Restriction (2 or 3)

Highway Free-Flow Speed

$\bigcirc$		

Percent Injury Accidents

#### TOTAL CMIA PROJECT COSTS (in escalated dollars)

49c2 3A650K

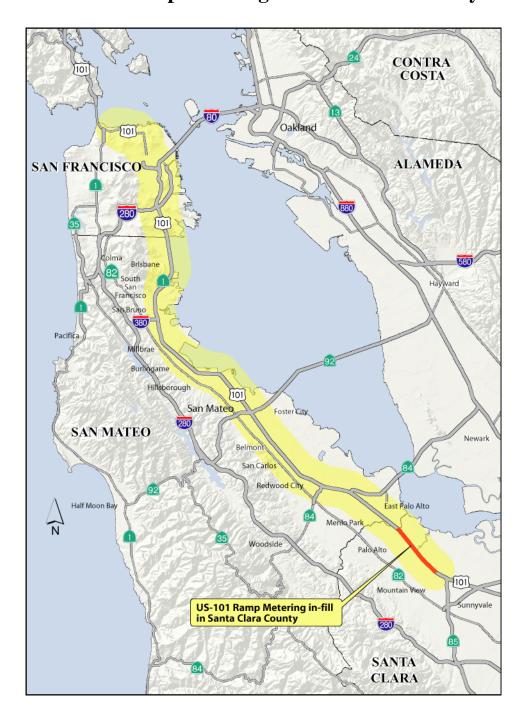
0.01 0.34 0.69

From Project Nomination Fa	act Sheet:	
Fiscal Yea	r:	
Before 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 After	\$ 3,035,000 \$ 3,035,000	
TOTAL Escalation Factor	\$ 6,070,000 3.5%	

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.

# **Project Location Map**

**US-101 Ramp Metering in Santa Clara County** 



### CMIA PROJECT NARRATIVE

## **US-101 Ramp Metering In-Fill in Santa Clara County**

# **Travel Corridor Description**

On a national and state level, US 101 is part of the Interregional Road System and the National Truck Network. It is a major north-south route along and near the coast between Los Angeles, at I-5, and the Pacific Northwest via the San Francisco Bay Area and is the backbone of the circulation system for many cities and communities in the region. US 101 is identified in the State's Interregional Transportation Strategic Plan as a "focus route", which assigns this freeway as requiring the highest priority for completion to the minimum facility standard in the 20-year planning period. It is also a Caltrans focus route according to the 1998 Interregional Transportation Strategic Plan. Regionally, the Metropolitan Transportation Commission (MTC) identifies US 101 as one of the four major "Interregional Corridors" within the Bay Area's transportation system.

The US-101 Peninsula corridor extends from the Golden Gate Bridge to the junction with Route 85 in Mountain View, and traverses through San Francisco, San Mateo and Santa Clara Counties. It is primarily a freeway facility along the entire length of the corridor, with the exception of a small segment in San Francisco, where it is a conventional highway. The corridor intersects with several transbay crossings, including the Dumbarton Bridge via the Willow Road interchange.

## **Project Function**

This project proposes to complete the installation and implementation of a ramp metering system in both directions of US-101 in Northern Santa Clara County. Ramp meters would be installed at four interchanges, which would close the remaining gap in the metering system between San Mateo and Santa Clara Counties, completing a 51-mile metered corridor along US 101. The project limits are from Rengstorff Avenue in Mountain View to the San Mateo County line, a distance of about 3 miles.

## **Project Benefits**

### A. Operations and Safety

The project will help relieve congestion, encourage the use of carpools and transit, and enhance safety along this corridor. More specifically, the closure of the gap in the ramp metering system will ensure that network can be fully controlled and operated efficiently. The Average Daily Traffic (ADT) volume for the corridor ranges between 38,000 (in San Francisco) and 249,000 (at the US-101/SR-92 interchange) during a typical weekday. Truck traffic accounts for between 1% and 5% of the daily traffic. Northbound AM commuters experience 2,500 vehicle hours of delay between I-280 and north of Trimble Road, thus making it the ninth most congested bay area freeway location. In total, 7,600 vehicle hours of delay are experienced daily by all commuters within the corridor.

Implementing ramp metering in this corridor will help better manage traffic, which will ultimately reduce congestion. Ramp metering has proven to be an effective management

method by controlling traffic volumes entering the freeway to prevent traffic demand from exceeding the facility's capacity, which results in the freeway breaking down into congestion. Additional benefits from metering on this corridor include the promotion of carpool and bus usage by providing preferential entry at high volume on-ramps, thus reducing delays for those vehicles, smoother traffic flow and reduced accidents resulting from congestion.

## B. Air Quality

The nine-county region is also part of the San Francisco Bay Area Air Quality Basin. The region currently meets the national attainment standards for Carbon Monoxide, Nitrogen Dioxide, Sulfur Dioxide, Particulate Matter ( $PM_{10}$ ), fine Particulate Matter ( $PM_{2.5}$ ), and lead. The area has been designated a marginal non-attainment area for Ozone based on current federal standards. Additionally, the region does not meet the current state standards for Ozone,  $PM_{10}$  and  $PM_{2.5}$ , but is in attainment for the other pollutants listed above. The projected reductions in daily vehicle hours of delay from this project will have a beneficial effect on air quality, as air pollutant emission reductions are realized from increased travel times and speeds.

In February 2005, the MTC adopted the 25-year Regional Transportation Plan (RTP). The transportation air quality conformity analysis of the Plan resulted in a positive conformity finding. This project is included in the current RTP and in the air quality conformity analysis, and is therefore part of a conforming transportation plan.

## C. Access to Jobs, Housing, Markets, and Commerce

The corridor functions as one of the region's most important freeways for moving goods into and out of the region, serving statewide, national, and international markets. It accommodates a combination of concentrated urban needs as well as goods movement demands generated from San Benito, Monterey and other nearby counties. The corridor is a particularly important freight corridor for the movement of agricultural products. It is a commute route from southern Santa Clara County and San Benito County to the urbanized Santa Clara Valley including major employment centers in Silicon Valley. It is also a heavily traveled highway corridor for recreational travel providing access for the South Bay to the Sierras via SR 152, to Southern California via SR 152 and I-5, and to tourist destinations in the Monterey Bay Area.

Some of the major traffic generators include: Silicon Valley, downtown San Jose, Mineta San Jose International Airport, San Jose State University, HP Pavilion at San Jose, Center for Performing Arts, Children's Discovery Museum, Tech Museum of Innovation, Valley Fair Mall, Great Mall, Santana Row, and Gilroy Premium Shopping Outlet. Hence, travel demand along this corridor depends upon ongoing commuter use as well as event-based use. With an expected increase of housing stock beyond the southern end of the corridor (toward Gilroy), travel demand will further increase to and from between jobs and housing.

### **Project Risks**

A Project Study Report for this project is expected to be complete in January 2007 and the project environmental phase will begin when funding becomes available. The scope

of the project is well defined and risks to the scope, cost and schedule are anticipated to be low to medium. A project risk management plan will also be implemented for this project to reduce and mitigate risks.

Potential cost increases could occur on this project, as the project has not reached the project report or design phases. Potential environmental impacts or mitigations could result in cost increases and schedule delays. The fluctuation in supply of construction materials and the cost of labor for installing ramp metering equipment could result in cost increases and schedule delays.

The implementation of ramp metering in this project may require agreements with local agencies, and may face local opposition, which could impact the implementation schedule.

# **Corridor System Management Plan/ Preserving Mobility Gains**

Caltrans District 4 and the Metropolitan Transportation Commission have launched the region-wide Freeway Performance Initiative. The intent is to advance a corridor based and performance driven transportation planning process, employing tested System Management principles and strategies to maximize the efficiency of the existing transportation infrastructure. A team of stakeholders within the corridor is now forming and a consultant team has been selected to begin a detailed performance assessment.

Over the past several years, VTA has adopted a corridor management approach to planning and project development. This has been manifested in critical corridor-wide studies that examine not just need and impact within the project limits, but the more comprehensive interactions throughout the corridor. These studies propose solutions that work to the benefit of the corridor as a whole. As part of the CMIA process, VTA is reviewing the effects and lessons learned through this process with the intent of developing this approach into a formal corridor management plan.

In the US 101 South corridor from the northern junction with SR- 85 in Mountain View to SR-129 in San Benito County, investments in TOS equipment have been made with the installation of 20 Closed-Circuit Television Cameras, 1 Changeable Message Sign, 1 Extinguishable Message Sign, 2 Highway Advisory Radio and 71 Traffic Monitoring Stations. Traffic monitoring stations will provide traffic data and closed circuit television cameras will enable incident verification and assist in incident response. Additionally, there is a project currently under construction that will add 4 Closed-Circuit Television Camera, 2 Changeable Message Sign, 3 Extinguishable Message Signs, and 1 Highway Advisory Radio in the southern part of the corridor in Santa Clara County. In total, there are 31 ramp meters that are operational along this corridor, and 23 ramp meters that have been installed, but are inactive pending local agreement.

APPENDIX A CMIA Guidelines

# **CORRIDOR MOBILITY IMPROVEMENT ACCOUNT**

# **Project Nomination Fact Sheet**

Nominating Agence	y: Caltrans		Fact Sheet Date:	01/09/07
Contact Person	Alan S. Chow			
Phone Number	(510) 286-4577	Fax Number	(510) 286-4773	
Email Address	alan _s_chow@dot.ca.gov			

Project Information County	Caltrans District	PPNO *	EA *	Region/MF	PO/ TIP ID*	Route / Corridor *	Post Mile Back *	Post Mile Ahead
Santa Clara	4	0483D	3A060K			101	49.0	52.5
NOTE: PPNO & EA ass	signed by Cal	trans. Region/M	IPO/TIP ID assigr	ned by RTPA/MP0	O. Route/Corrido	or & Post Mile Ba	ck/Ahead used for Stat	e Highway System.
agialativa Diatriata	Senate:	11, 13	-	•	Congressional	: 14		
_egislative Districts	Assembly:	21, 22						
mplementing Agency	PA&ED:	Caltrans			PS&E: Call	trans		
(by component)	R/W:	Caltrans			CON: Cali	trans		
Project Title	US-101 F	Ramp Meter	ing in-fill in S	Santa Clara C	County			
Description of Major F	Desirat Dans							
This project is expe and buses at some smoother flow of tra	cted to hel metered o affic and les	p promote the n-ramps. In ss congestion	addition to th	e delay savin	gs benefit, th	ne accident ra	te is expected to o	
This project is expe and buses at some smoother flow of tra Expected Source(s) of	cted to hel metered o affic and les	p promote the n-ramps. In ss congestion  Funding Neconstantial the secons of the secon	addition to th	e delay savin	gs benefit, th	ne accident ra	te is expected to o	
This project is expe and buses at some smoother flow of tra Expected Source(s) of Project Delivery Miles Project Study Report (P	cted to hel metered o affic and les f Additional	p promote the n-ramps. In ss congestion  Funding Neconstant the telephone the telephon	addition to th	e delay savin	gs benefit, th	ne accident ra	te is expected to o	
This project is expeand buses at some smoother flow of transmoother flow of Project Study Report (Project Study Report (Project of Preparation	f Additional  tones (mon- PSR) comple	p promote the n-ramps. In ss congestion  Funding Neconstant the tensor of the tensor o	essary to Comp	olete Project - a	gs benefit, th	ne accident ra	te is expected to o	
This project is expeand buses at some smoother flow of transmoother flow of Preparation flow of the project Study Report (Project Study Rep	rected to hel metered of the second s	p promote the n-ramps. In ss congestion  Funding Neconstant the tentile tentile to the tentile tentile to the t	essary to Comp	olete Project - a	gs benefit, th	ne accident ra	te is expected to o	
This project is expeand buses at some smoother flow of transmoother flow	tones (monoser) Documental Documental Documental Documental Documental Documental Documental Meters of the Additional Control of the Additional Cont	p promote the n-ramps. In ss congestion  Funding Neconstant the Type: CE ental Document	Janu t Octo	olete Project - a vary 2007 ber 2008 ember 2008	gs benefit, th	ne accident ra	te is expected to o	
This project is experient and buses at some smoother flow of transmoother  tones (monoser) Documental Documental Documental Documental Documental Documental Documental Meters of the Additional Control of the Additional Cont	p promote the n-ramps. In ss congestion  Funding Neconstant the Type: CE ental Document	Janu t Octo	olete Project - a	gs benefit, th	ne accident ra	te is expected to o		
This project is expeand buses at some smoother flow of transmoother flow of Preparation flow of Preparation flow of the project Study Report (Project Study Repor	f Additional  tones (mones)    Document   Documental Documental Documents   Document   Document   Documental D	p promote the n-ramps. In ss congestion  Funding Neconstant the Type: CE ental Document	Janu t Octo	olete Project - a vary 2007 ber 2008 ember 2008	gs benefit, th	ne accident ra	te is expected to o	
This project is expeand buses at some smoother flow of transmoother flow flow flow flow flow flow flow flow	f Additional  tones (mone   Document   Docum	p promote the n-ramps. In ss congestion  Funding Neconstant the Type: CE ental Document	Janu t Octo Decc Marc	olete Project - a  lary 2007  ber 2008 ember 2008	gs benefit, th	ne accident ra	te is expected to o	
This project is expeand buses at some smoother flow of transmoother flow	f Additional  tones (mon- PSR) comple Document aft Environmental Do- pecifications, n	p promote the n-ramps. In ss congestion  Funding Neconstant the Type: CE ental Document	Janu t Octo Marc July	olete Project - a  vary 2007  ber 2008 ember 2008 ch 2011 ch 2011	gs benefit, th	ne accident ra	te is expected to o	

The CTC Corridor Mobility Improvement Account (CMIA) Program Guidelines should have been read and understood prior to preparation of the CMIA Fact Sheet.

A copy of the CTC CMIA Guidelines and a template of the Project Fact Sheet are available at: http://www.dot.ca.gov/hq/transprog/ and at: http://www.catc.ca.gov/

### CORRIDOR MOBILITY IMPROVEMENT ACCOUNT **Project Nomination Fact Sheet - Project Cost and Funding Plan**

(dollars in thousands and escalated)
Shaded fields are automatically calculated. Please do not fill these fields.

				Date: 9-Jan-07
County	CT District	PPNO *	EA*	Region/MPO/TIP ID *
Santa Clara	4	0483D	3A060K	0
Project Title:	US-101 Ramp	Metering in-fill in Santa Cl	ara County	

<sup>\*</sup> NOTE: PPNO and EA assigned by Caltrans. Region/MPO/TIP ID assigned by RTPA/MPO

<b>Proposed Total Pro</b>	ject Cost							Project
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	0	176	88	0	0	0	0	264
PS&E	0	0	123	123	123	0	0	369
R/W SUP (CT) *	0	0	17	18	18	0	0	53
CON SUP (CT) *	0	0	0	0	0	365	0	365
R/W	0	0	0	0	10	0	0	10
CON	0	0	0	0	2,639	0	0	2,639
TOTAL	0	176	228	141	2,790	365	0	3,700

Corridor Management Improvement Account (CMIA) Program								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)		176	88					264
PS&E			123	123	123			369
R/W SUP (CT) *			17	18	18			53
CON SUP (CT) *						365		365
R/W					10			10
CON					2,639			2,639
TOTAL	0	176	228	141	2,790	365	0	3,700

<sup>\*</sup> NOTE: R/W SUP and CON SUP to be used only for projects implemented by Caltrans

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0

Shaded fields are automatically calculated. Please do not fill these fields.

# CORRIDOR MOBILITY IMPROVEMENT ACCOUNT Project Nomination Fact Sheet - Project Cost and Funding Plan (dollars in thousands and escalated) Shaded fields are automatically calculated. Please do not fill these fields.

							Date:	9-Jan-07
County	CT District	PPN	0 *		EA*		Region/MP	O/TIP ID *
Santa Clara	4	0483	3D		3A060K		(	
Project Title:	US-101 Ramp	o Metering in-fi	II in Santa Cla	ra County				
* NOTE: PPNO and EA as	signed by Caltrans.	Region/MPO/TIP I	D assigned by RTI	PA/MPO				
Funding Source:			,	,		,	,	
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *		+	-		-			0
R/W		+	-		-			0
CON								0
TOTAL	0	0	0	0	0	0	0	0
TOTAL	U	U	U	U	U		U	U
Funding Source:								
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)	1 1101	01700	00/00	00/10	10/11	11/12	12/10	0
PS&E	1	+	<del></del>				1	0
		+						0
R/W SUP (CT) * CON SUP (CT) *		+					+	
								0
R/W				-				0
CON								0
TOTAL	0	0	0	0	0	0	0	0
E								
Funding Source:	D :	07/00	00/00	00/40	10/11	44/40	40/40	T
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
E&P (PA&ED)								0
PS&E								0
R/W SUP (CT) *								0
CON SUP (CT) *								0
R/W								0
CON								0
TOTAL	0	0	0	0	0	0	0	0
<del></del>								
Funding Source					-			
Funding Source:	Dein	07/00	09/00	00/40	40/44	11/10	40/40	Total
Component	Prior	07/08	08/09	09/10	10/11	11/12	12/13	Total
Component E&P (PA&ED)	Prior	07/08	08/09	09/10	10/11	11/12	12/13	0
Component E&P (PA&ED) PS&E	Prior	07/08	08/09	09/10	10/11	11/12	12/13	0
Component E&P (PA&ED) PS&E R/W SUP (CT) *	Prior	07/08	08/09	09/10	10/11	11/12	12/13	0 0 0
Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) *	Prior	07/08	08/09	09/10	10/11	11/12	12/13	0 0 0
Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W	Prior	07/08	08/09	09/10	10/11	11/12	12/13	0 0 0 0
Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON								0 0 0 0 0
Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W	Prior		08/09	09/10	10/11	11/12		0 0 0 0 0
Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL	0	0	0	0				0 0 0 0 0
Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Additional Funding	0 Needs (fund	0 ling needs not	0 t yet committ	0 ed)	0	0	0	0 0 0 0 0 0
Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Additional Funding Component	0	0	0	0				0 0 0 0 0 0 0
Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Additional Funding Component E&P (PA&ED)	0 Needs (fund	0 ling needs not	0 t yet committ	0 ed)	0	0	0	0 0 0 0 0 0 0
Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Additional Funding Component E&P (PA&ED) PS&E	0 Needs (fund	0 ling needs not	0 t yet committ	0 ed)	0	0	0	0 0 0 0 0 0 0 0
Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Additional Funding Component E&P (PA&ED) PS&E R/W SUP (CT) *	0 Needs (fund	0 ling needs not	0 t yet committ	0 ed)	0	0	0	0 0 0 0 0 0 0 0 Total
Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Additional Funding Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) *	0 Needs (fund	0 ling needs not	0 t yet committ	0 ed)	0	0	0	0 0 0 0 0 0 0 0 Total
Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON TOTAL  Additional Funding Component E&P (PA&ED) PS&E R/W SUP (CT) * CON SUP (CT) * R/W CON SUP (CT) *	0 Needs (fund	0 ling needs not	0 t yet committ	0 ed)	0	0	0	0 0 0 0 0 0 0 0 Total
Component  E&P (PA&ED)  PS&E  R/W SUP (CT) *  CON SUP (CT) *  R/W  CON  TOTAL   Additional Funding  Component  E&P (PA&ED)  PS&E  R/W SUP (CT) *  CON SUP (CT) *	0 Needs (fund	0 ling needs not	0 t yet committ	0 ed)	0	0	0	0 0 0 0 0 0 0 0 Total

Shaded fields are automatically calculated. Please do not fill these fields.

District:	4	Project #	50
		EA:	3A060K
PROJECT:	Ramp metering in-fill on 101: EA# 3A060K - SCL 101	PPNO:	

1A PROJEC	T DATA
Type of Project	
Select project type from list	Ramp Metering
Project Location (enter 1 for So. Cal., 2 for No.	Cal., or 3 for rural)
Length of Construction Period	1.5 years
Length of Peak Period(s) (up to 8 hrs)	Existing 4 hours

Number of General Traffic Lanes Number of HOV Lanes HOV Restriction (2 or 3)  Highway Free-Flow Speed Ramp Design Speed (if aux. lane/off-ramp proj.) Length (in miles) Highway Segment Affected Area	65 35	8 65
HOV Restriction (2 or 3)  Highway Free-Flow Speed Ramp Design Speed (if aux. lane/off-ramp proj.) Length (in miles) Highway Segment		
Highway Free-Flow Speed Ramp Design Speed (if aux. lane/off-ramp proj.) Length (in miles) Highway Segment		
Ramp Design Speed (if aux. lane/off-ramp proj.) Length (in miles) Highway Segment		
Ramp Design Speed (if aux. lane/off-ramp proj.) Length (in miles) Highway Segment		
Length (in miles) Highway Segment	35	25
	3.5	35 3.5
	3.5	
/ illocted Alea	3.5	3.5
Average Daily Traffic		
Current	202,000	
Current	w/o Project	w/ Project
Base (Year 1)	207,523	207,523
Forecast (Year 20)	277,476	277,476
Average Hourly HOV Traffic (if HOV lanes)		0
Percent Traffic in Weave (if oper. improvement)		
Percent Trucks (include RVs, if applicable)	9%	9%
Truck Speed (if passing lane project)		
<u> </u>		
On-Ramp Volume	Peak	Non-Peak
Hourly Ramp Volume (if aux. lane/on-ramp proj.)	0	0
Metering Strategy (1, 2, 3, or D, if on-ramp proj.)		

1C HIGHWAY ACCIDENT DATA						
Actual 3-Year Accident Data for Facility						
	Count (No.)	Rate				
Fatal Accidents		0.01				
Injury Accidents		0.34				
Property Damage Only (PDO) Accidents		0.69				
Statewide Average for Highway Classification						
Accident Rate (per million vehicle-miles)	Existing	New				
Percent Fatal Accidents						
Percent Injury Accidents						

 -		
	Γ	

rom Project Nomination Fact Sheet:				
Fiscal Yea	r:			
Before 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 After				
TOTAL Escalation Factor	\$ 3,704,000 3.5%			

Model should be run for both roads for intersection or bypass highway projects, and may be run twice for connectors. Press button below to prepare model to enter data for second road. After data are entered, results reflect total project benefits.